

# Resurfacing Upper Deck (Contract No. 04-014504)

The as-built drawings, which are contained in these CDs, are scanned from drawings of the existing structure for the convenience of the contractor and as a means to convey to the contractor the available information regarding the existing structure. It is to be understood that no claim is being made as to the accuracy or completeness of the said information and that the State of California or its officers or agents shall not be responsible for the manner in which the contractor interprets and uses this information or for the accuracy, currency or completeness of these scanned as-built drawings. The contractor shall be responsible to obtain, at the contractor’s expense, any additional information that the contractor deems necessary for completely and accurately assessing the existing conditions of the structure. The contractor shall not be entitled to any compensation for any claim arising from inaccuracy or insufficiency of these as-built drawings or in anyway related to these drawings.

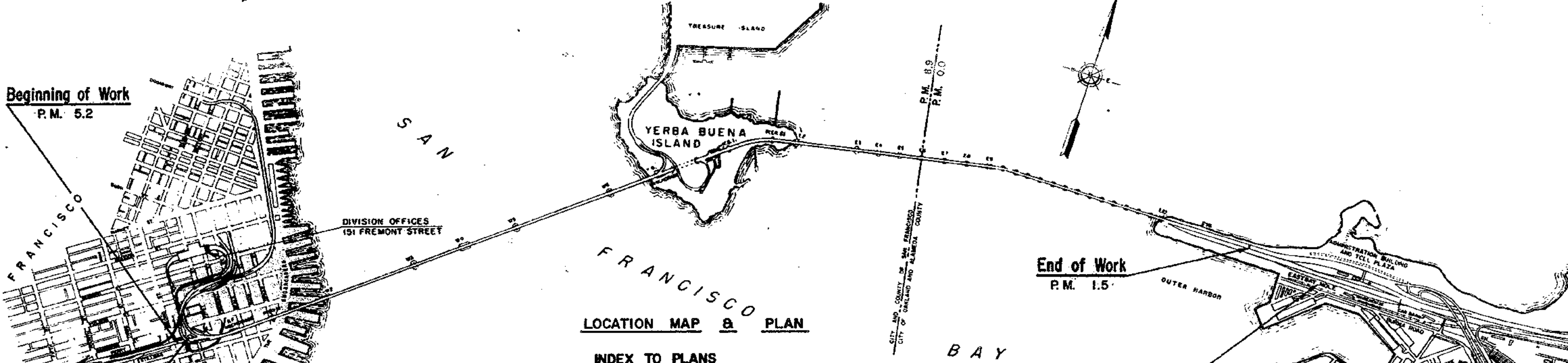
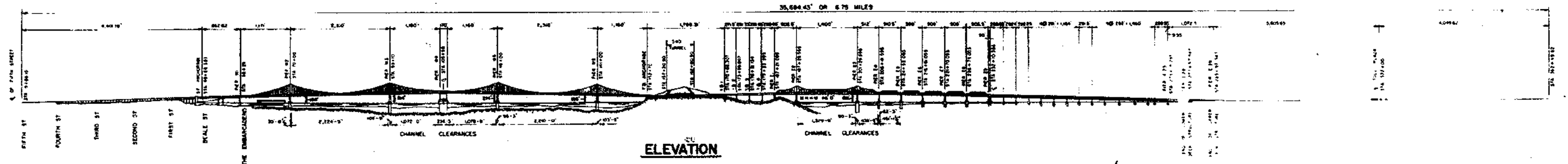
- [1. Project Plan and Elevation](#)
- [2. SFOBB 34+00 to SFOBB 49+00](#)
- [3. SFOBB 49+00 to SFOBB 232+00](#)
- [4. SFOBB 232+00 to SFOBB 294+00](#)
- [5. Traffic Stripes and Pavement Markings](#)
- [6. SFOBB 48+00 to SFOBB 106+75](#)
- [7. SFOBB 106+75 to SFOBB 162+75](#)
- [8. SFOBB 162+75 to SFOBB 221+50](#)
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- [10. Steel Armor Joint Details](#)
- [11. Layout and Details-Pier W1](#)
- [12. Layout and Details-Piers W2, W3, W5 and W6](#)
- [13. Layout and Details-Pier W-4 East and West](#)
- [14. Layout and Details-Y.B. Anchorage](#)
- [15. Layout and Details-Pier YB3](#)
- [16. Layout and Details-Pier E4](#)
- [17. Layout and Details-Pier E11](#)

STATE OF CALIFORNIA  
BUSINESS AND TRANSPORTATION AGENCY  
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY  
IN SAN FRANCISCO AND ALAMEDA COUNTIES, IN SAN FRANCISCO AND OAKLAND  
ON THE SAN FRANCISCO - OAKLAND BAY BRIDGE  
To be supplemented by Standard Plans dated January 1975

DIST	COUNTY	ROUTE	POST MILES	SHEET NO.	TOTAL SHEETS
04	SF ALA	80	5.2/8.9 0.0/1.5	1	17

APPROVED *J. J. ...*  
CHIEF, DIVISION OF CONSTRUCTION AND RESEARCH  
REGISTERED CIVIL ENGINEER NO. 5645  
December 8, 1975



INDEX TO PLANS

SHEET NUMBER	TITLE	SHEET NUMBER	TITLE
1.	PROJECT PLAN AND ELEVATION PAVING AND STRIPING	9.	S.F.O.B.B. 221+50 TO S.F.O.B.B. 277+40
2.	S.F.O.B.B. 34+00 TO S.F.O.B.B. 49+00	10.	STEEL ARMOR JOINT DETAILS
3.	S.F.O.B.B. 49+00 TO S.F.O.B.B. 232+00		MODIFICATIONS OF GRATING SUPPORTS
4.	S.F.O.B.B. 232+00 TO S.F.O.B.B. 294+00	11.	LAYOUT AND DETAILS - PIER W1
5.	TRAFFIC STRIPES AND PAVEMENT MARKINGS DECK JOINT SEALING	12.	LAYOUT AND DETAILS - PIER W2, W3, W5 AND W6
6.	S.F.O.B.B. 46+00 TO S.F.O.B.B. 106+75	13.	LAYOUT AND DETAILS - PIER W4 EAST AND WEST
7.	S.F.O.B.B. 106+75 TO S.F.O.B.B. 162+75	14.	LAYOUT AND DETAILS - Y.B. ANCHORAGE
8.	S.F.O.B.B. 162+75 TO S.F.O.B.B. 221+50	15.	LAYOUT AND DETAILS - PIER YB3
		16.	LAYOUT AND DETAILS - PIER E4
		17.	LAYOUT AND DETAILS - PIER E11

CONTRACT No. 04-014504  
DATE ACCEPTED 3-9-77  
**AS BUILT**  
RESIDENT ENGINEER Lloyd Fisk  
REVISIONS BY C.F. Cielona DATE 1-80

Contract No. 04-014504

STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION	
DESIGNED BY <i>Robert L. ...</i>	APPROVED JULY 9, 1975
CHECKED BY <i>...</i>	
APPROVED <i>...</i>	
SAN FRANCISCO - OAKLAND BAY BRIDGE RESURFACING UPPER DECK	
PROJECT PLAN AND ELEVATION	
SCALE 1" = 1160'	SHEET NO. 1
DRAWING NO. 04-014504-1 R	

180	As built without revision.	BY JFR
DATE	REVISION	CHK

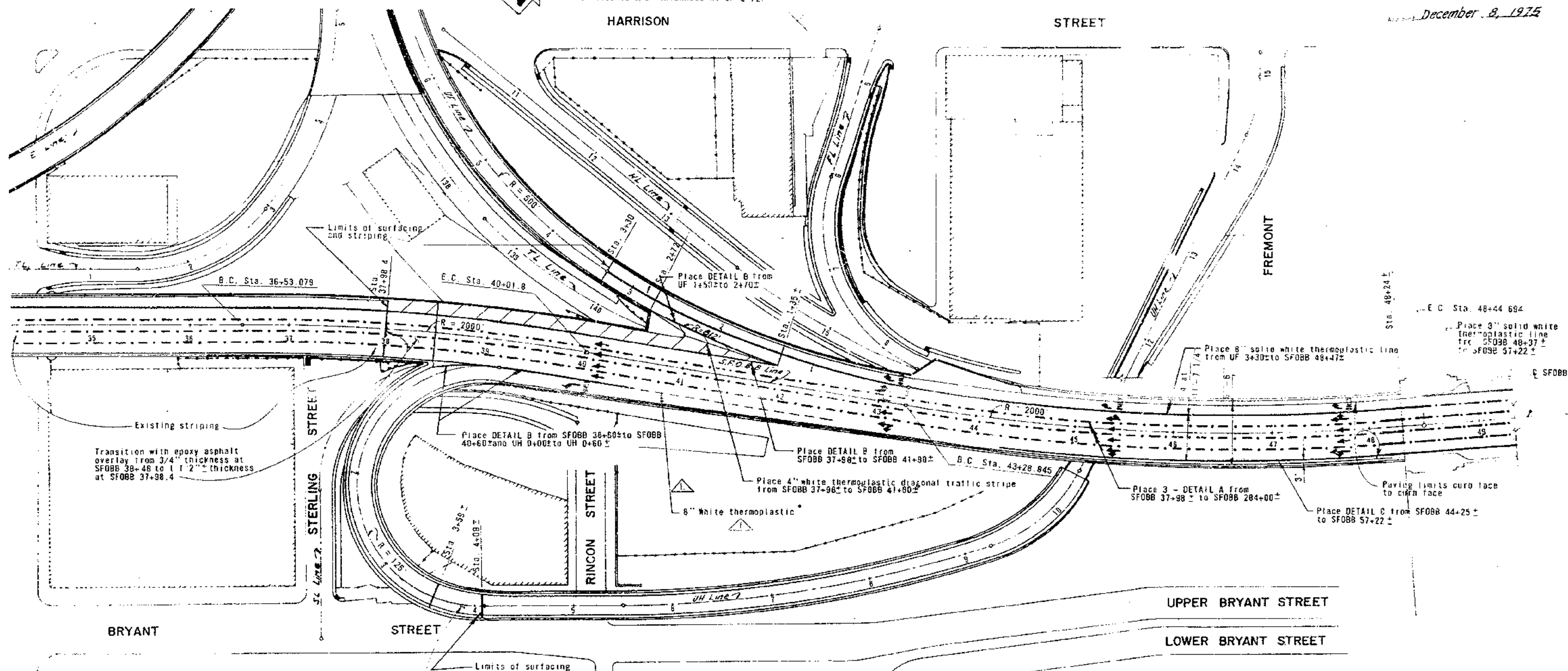
December 8, 1975

Transition with epoxy asphalt  
overlay from 3/4" thickness at  
UF 1+35 to 3/8" thickness at UF 2+72.

HARRISON

STREET

FREMONT



## NOTE

See sheet 3 for GENERAL NOTES FOR PAVING AND STRIPING.

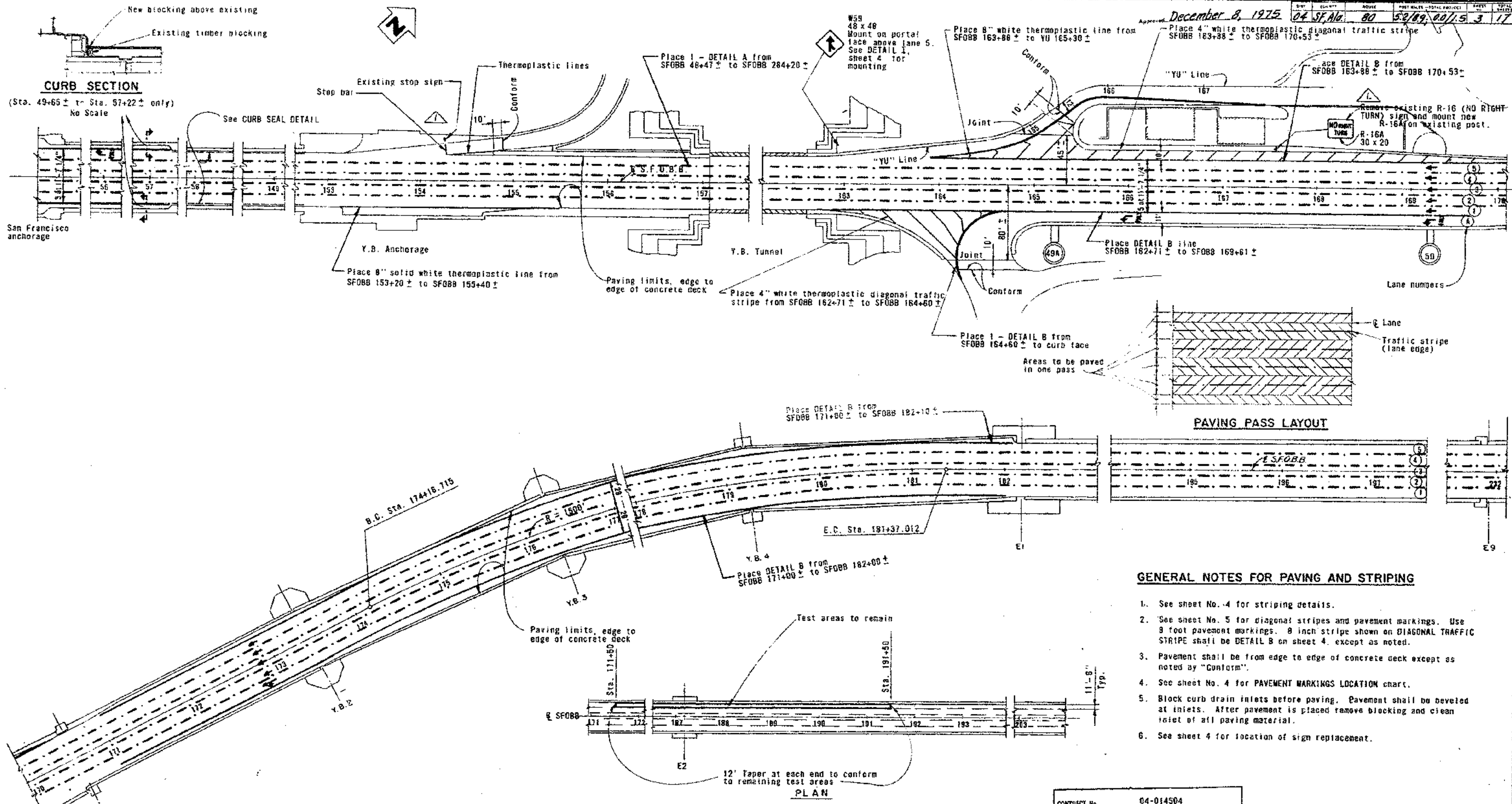
\* Place DETAIL D without markers from  
SF08B 40+60 to SF08B 42+55 ±  
(DETAIL D on sheet 4)

CONTRACT NO.	04-014504
DATE ACCEPTED	3-9-77
<b>AS BUILT</b>	
DESIGN ENGINEER	Lloyd Fisk
REVISIONS BY	C.F. Cielona DATE 1-80



STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION —			
DESIGN	BY H. Lytle	CHECK R. B. Smith	APPROVED JULY 9, 1975  REGISTERED ENGINEER - CIVIL
DRAWN	BY C. F. Cielona	CHECK R. B. Smith	
SPECIFICATION	BY C. F. Cielona	ESTIMATE R. B. Smith	
APPROVAL	RECOMMENDED:		
SAN FRANCISCO - OAKLAND BAY BRIDGE RESURFACING UPPER DECK PAVING AND STRIPING SF08B 34+00 TO SF08B 49+00			
SCALE UNLESS NOTED 1"=50'		SHEET NO. 2	DRAWING NO. 04-014504-2 R

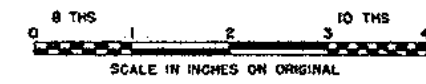
1-80	As built with revision.	cfb	JFR
MARK	DATE	REVISION	BY
			CHECK



# GENERAL NOTES FOR PAVING AND STRIPING

1. See sheet No. 4 for striping details.
2. See sheet No. 5 for diagonal stripes and pavement markings. Use 8 foot pavement markings. 8 inch stripe shown on DIAGONAL TRAFFIC STRIPE shall be DETAIL B on sheet 4, except as noted.
3. Pavement shall be from edge to edge of concrete deck except as noted by "Conform".
4. See sheet No. 4 for PAVEMENT MARKINGS LOCATION chart.
5. Block curb drain inlets before paving. Pavement shall be beveled at inlets. After paving is placed remove blocking and clean inlet of all paving material.
6. See sheet 4 for location of sign replacement.

CONTRACT No.	04-014504
DATE ACCEPTED	3-9-77
<b>AS BUILT</b>	
RESIDENT ENGINEER	Lloyd Fisk
REVISIONS BY	C.F. Cleish DATE 1-80



MARK	DATE	REVISION	BY	CHECK
1	1-80	As built with revision.	JFR	

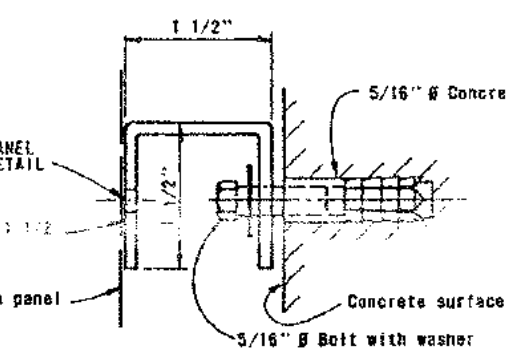
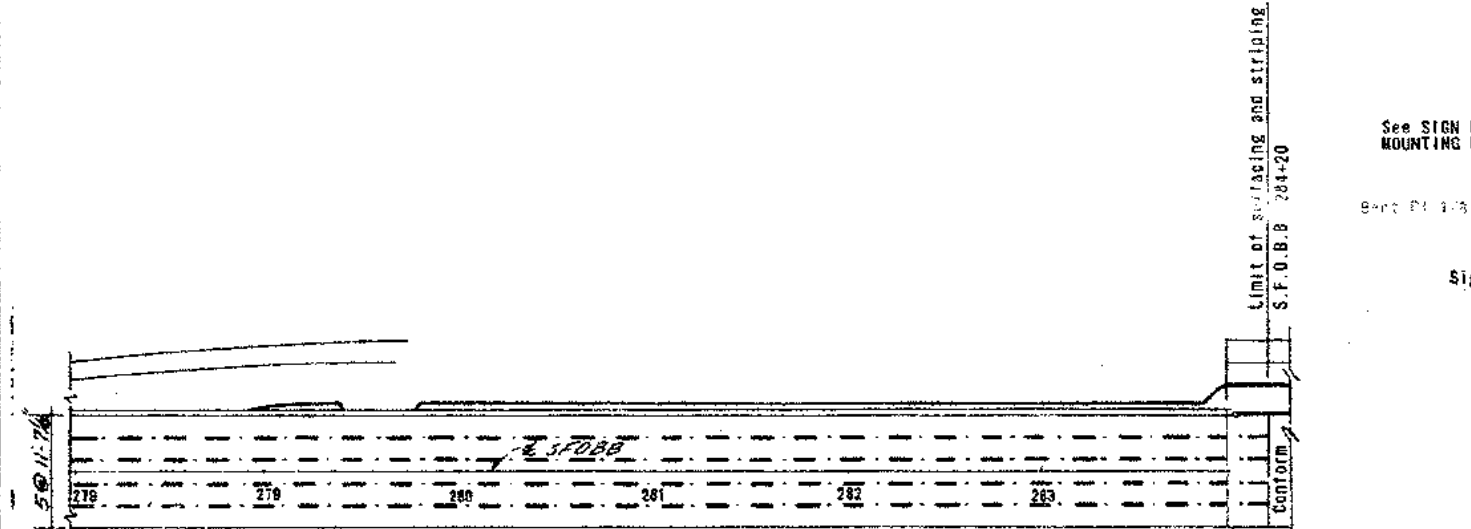
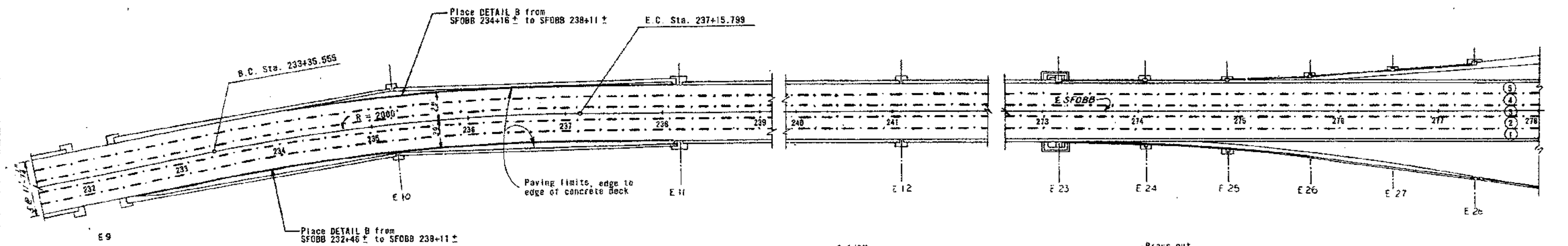
STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION —			
DESIGN	BY A. Lytle	CHECK R. B. B. B.	
DRAWN	BY S. J. Jones	CHECK R. B. B. B.	
SPECIFICATION	1/2" on Plans	ESTIMATE R. B. B. B.	
APPROVAL RECOMMENDED:			
Robert R. B. B. B.			

APPROVED JULY 9, 1975

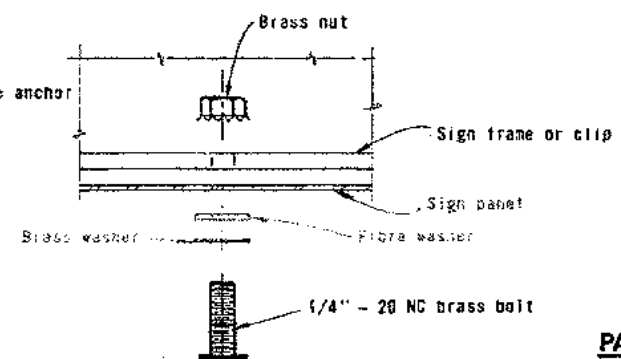
S. Larsen

SAN FRANCISCO-OAKLAND BAY BRIDGE	
RESURFACING UPPER DECK	
PAVING AND STRIPING	
S.F.O.B.B. 49+00 TO S.F.O.B.B. 232+00	
SCALE	UNLESS NOTED 1" = 50'
SHEET NO.	3
DRAWING NO.	04-014504-R

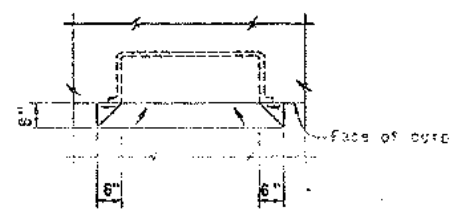
Approved December 8, 1975



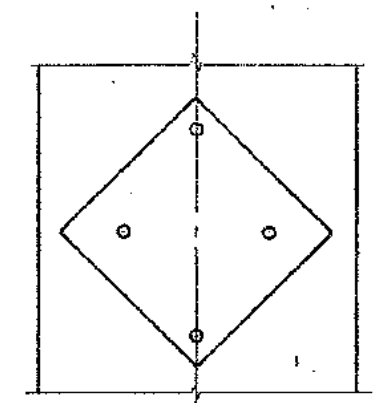
CONCRETE ANCHORING DETAIL



SIGN PANEL MOUNTING DETAIL  
(Bolt assemblies shown shall be State furnished)



PAVEMENT RECESS AT CURB INLETS  
(See Note 5 on sheet 3)  
No Scale

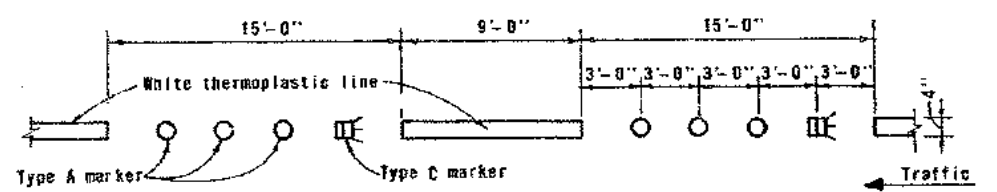


TYPE G  
DETAIL I  
W59 MOUNTING DETAIL  
Full Size

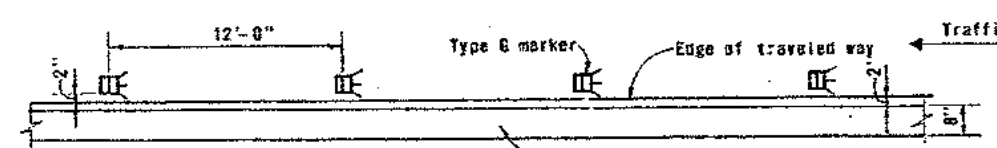
SIGN REPLACEMENT				
STATION	LT.	RT.	CODE	L x H
108+44	X	X	R2	48 x 60
126+81	X		S10	48 x 54
147+92	X	X	R2	48 x 60
153+60	X		R45	48 x 60
232+00	X	X	R2	48 x 60
274+00	X	X	R2	48 x 60

PAVEMENT MARKINGS LOCATION					
S.F.D.B.R.	LANE NUMBERS				
	ARROWS			"ONLY"	SD
STA.	A	D	E		
40+16 ±	2,3,4,5	1			
43+10 ±	2,3	5	1,4	5	
45+50 ±	2,3	5	1,4	5	
47+80 ±	2,3	5	1,4	5	
56+00 ±	1,2,3	5	4	5	
71+00 ±					1,2,3,4,5
123+50 ±					1,2,3,4,5
166+00 ±	1,2,3,4,5	A		A	
169+40 ±	1,2,3,4,5	A		A	
172+80 ±	2,3,4,5		1		
176+50 ±					1,2,3,4,5
229+00 ±					1,2,4,4,5
262+00 ±					1,2,3,4,5

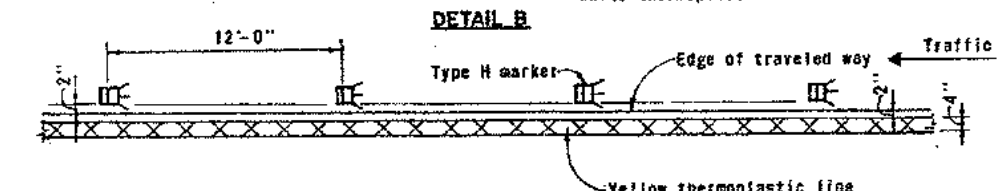
NOTE  
1. See sheet 3 for GENERAL NOTES FOR PAVING AND STRIPING.



DETAIL A



DETAIL B



DETAIL C

"ONLY" LAYOUT  
Scale: None

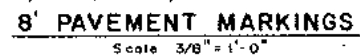
CONTRACT NO. 04-014504  
DATE ACCEPTED 3-9-77  
**AS BUILT**  
RESIDENT ENGINEER Lloyd Fisk  
REVISIONS BY C.F. Cleland DATE 1-80

MARK	DATE	REVISION	BY	CHK.
1-80		As built with revision	JPR	

STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION -  
DESIGNER: Robert R. Birdwell  
CHECKED: J. Loken  
APPROVED: JULY 9, 1975

APPROVED: JULY 9, 1975  
DESIGN ENGINEER - REGISTERED ENGINEER

SAN FRANCISCO-OAKLAND BAY BRIDGE  
RESURFACING UPPER DECK  
PAVING AND STRIPING  
SFOBB 232+00 TO SFOBB 294+00  
SCALE 1" = 50' UNLESS NOTED  
SHEET NO. 4  
DRAWING NO. 04-014504-4R



**STOP BAR**  
Scale:  $3/16" = 1'-0"$   
 $3/8" = 1'-0"$

**8" or 4" SHOULDER STRIPE**  
No Scale

**STANDARD SINGLE BROKEN STRIPE**  
No Scale

**STANDARD ONE-WAY BARRIER STRIPE**  
No Scale

**STANDARD TWO-WAY BARRIER STRIPE**  
No Scale

Black - where barrier stripe is painted on concrete pavement - unpainted of Yellow

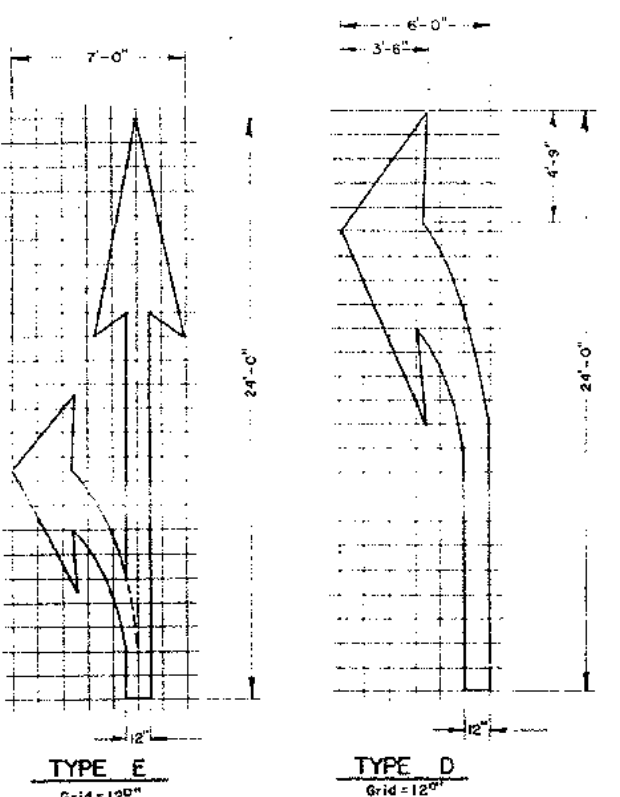
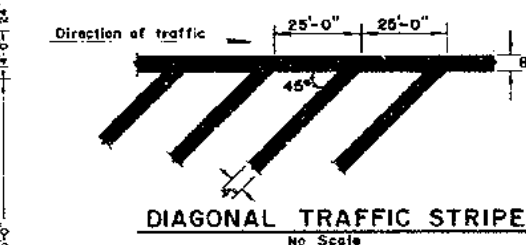
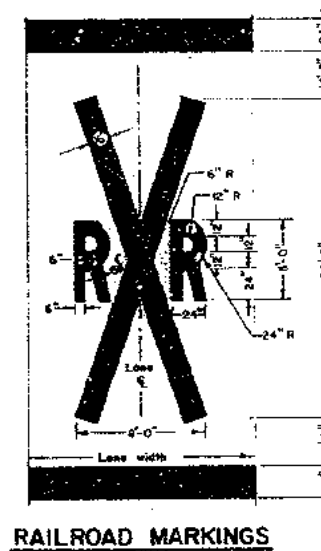
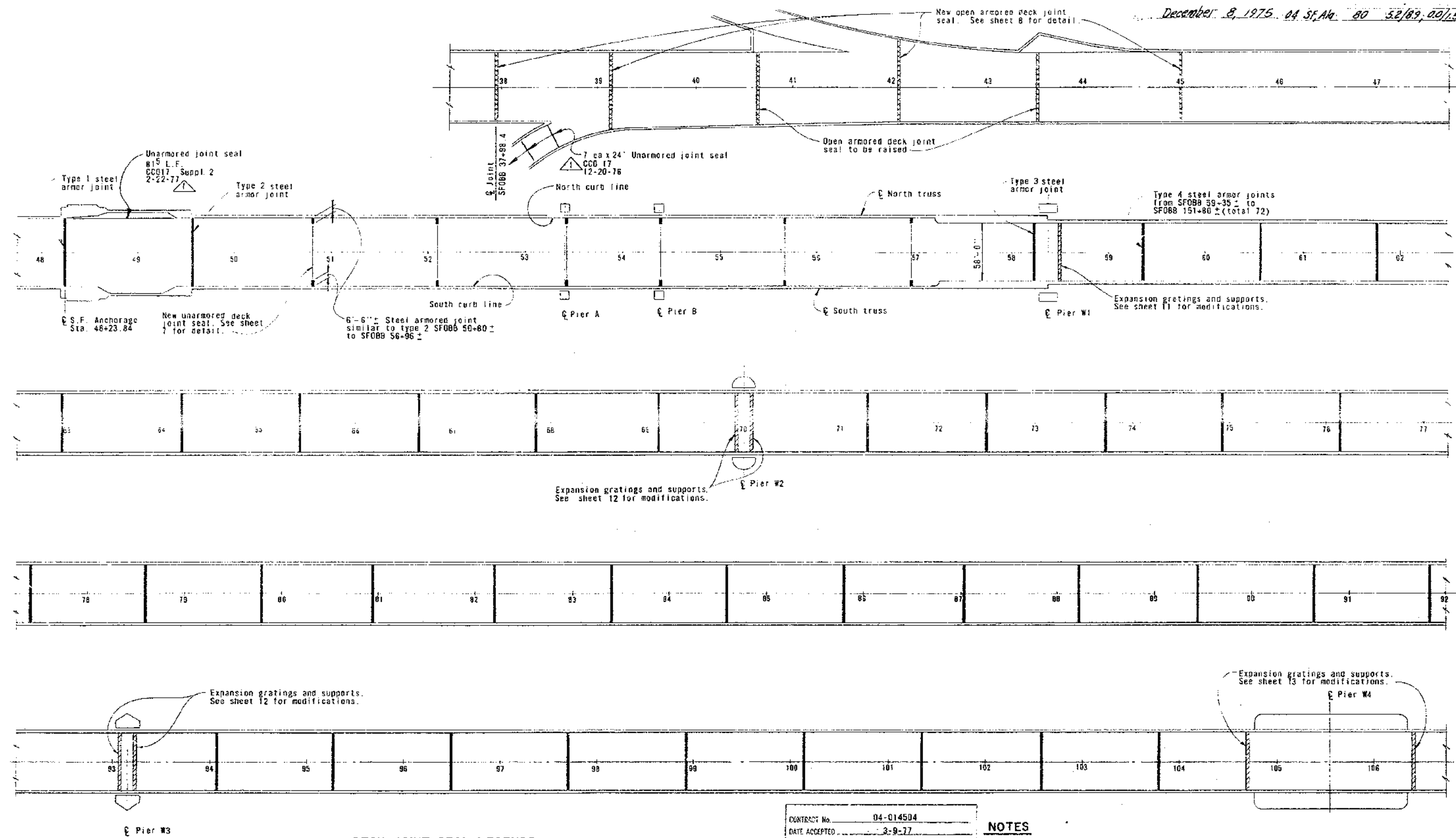


Diagram illustrating a Pedestrian Crossing. The crossing is marked with a single dashed traffic lane stripe (where applicable). The scale is 3/16" = 1'-0".



SCALE AS NOTED	SHEET NO. 5	DRAWING NO. 04-014504-5 R
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DECK JOINT SEAL LEGENDS

TYPE OF MATERIAL

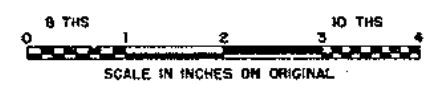
- Unarmored deck joint seal; see sheet 7 for details.
- Open armored deck joint seal; see sheet 8 for details
- Steel armor joint; see sheet 10 for details
- Special tunnel deck seal; see sheet 7 for details.
- Expansion gratings and supports; see sheets 11 thru 17 for details

- Epoxy asphalt surfacing
- Existing Celotex
- Polyurethane
- Expanded polyethylene foam or Expanded EPDM (Ethyl Propylene Diene Monomer) or Expanded nitril vinyl foam.

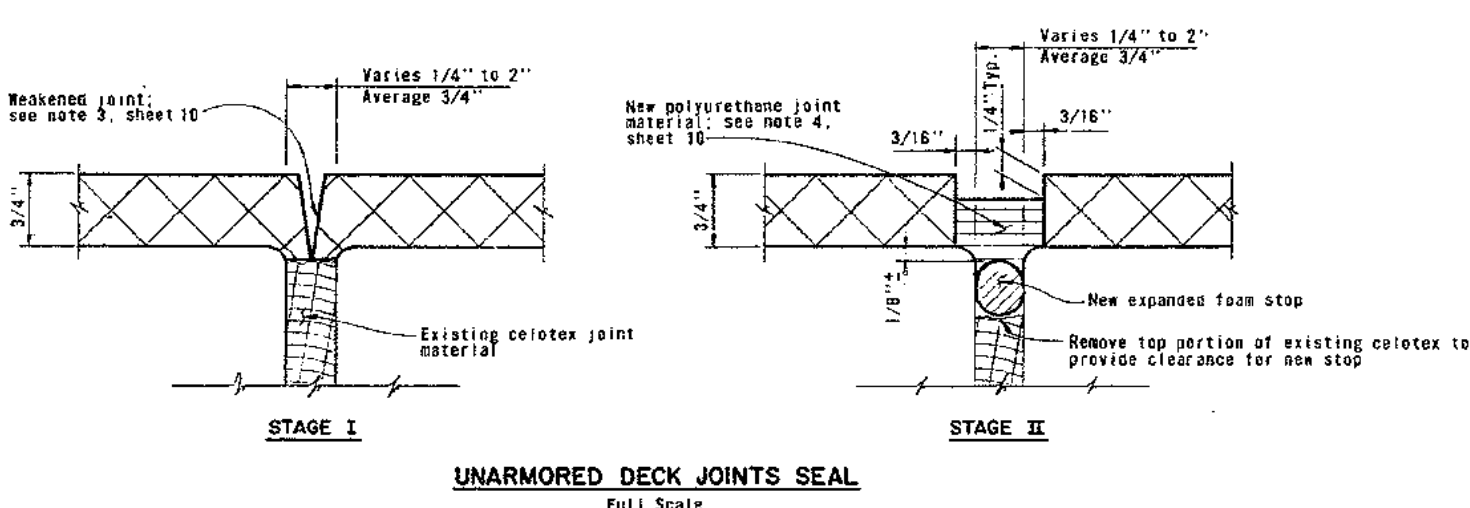
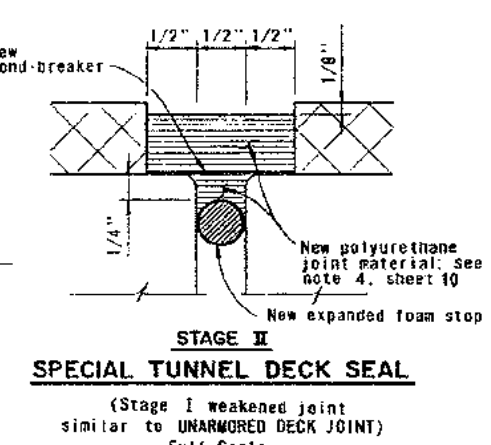
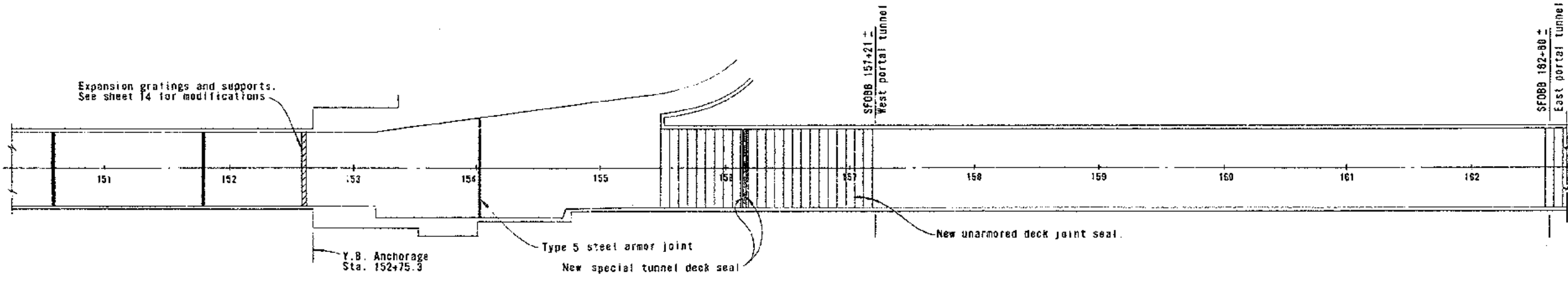
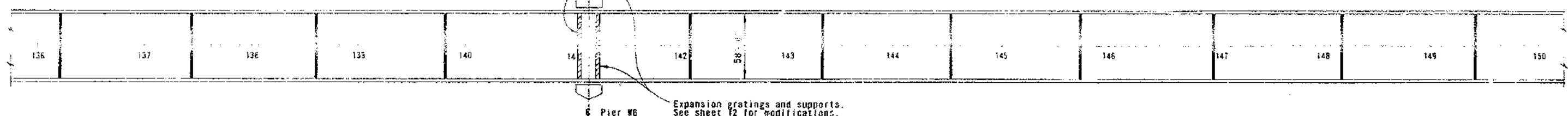
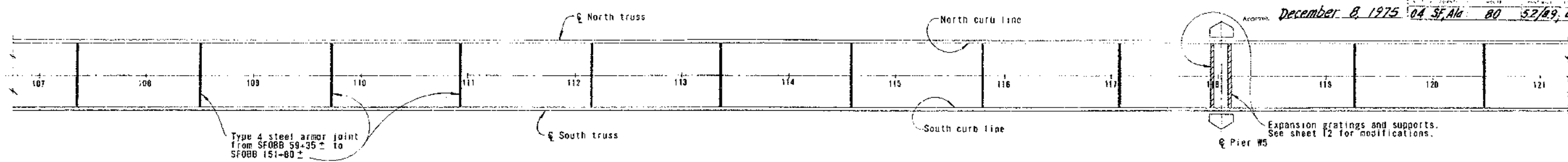
CONTRACT No. 04-014504  
DATE ACCEPTED 3-9-77  
**AS BUILT**  
RESIDENT ENGINEER Lloyd Fisk  
REVISIONS BY C.F. Cieloha DATE 1-80

NOTES

- For details of steel armor joint types, see sheet 10.
- For horizontal alignment of roadway see sheets 2, 3 and 4.

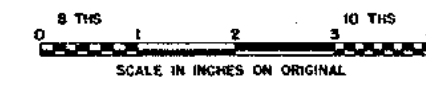


STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION —	
DESIGN BY <i>A. Lyche</i>	CHECKED BY <i>R. B. Bicknell</i>
DRAWN BY <i>W. C. Cieloha</i>	CHECKED BY <i>B. B. Bicknell</i>
SPECIFICATION <i>W. C. Cieloha</i>	ESTIMATE <i>B. B. Bicknell</i>
APPROVAL RECOMMENDED:	APPROVED JULY 9, 1975
SAN FRANCISCO-OAKLAND BAY BRIDGE RESURFACING UPPER DECK DECK JOINT SEALING SFOB 48+00 TO SFOB 106+75	
SCALE UNLESS NOTED 1" = 50'	SHEET NO. 6 DRAWING NO. 04-014504-S-6



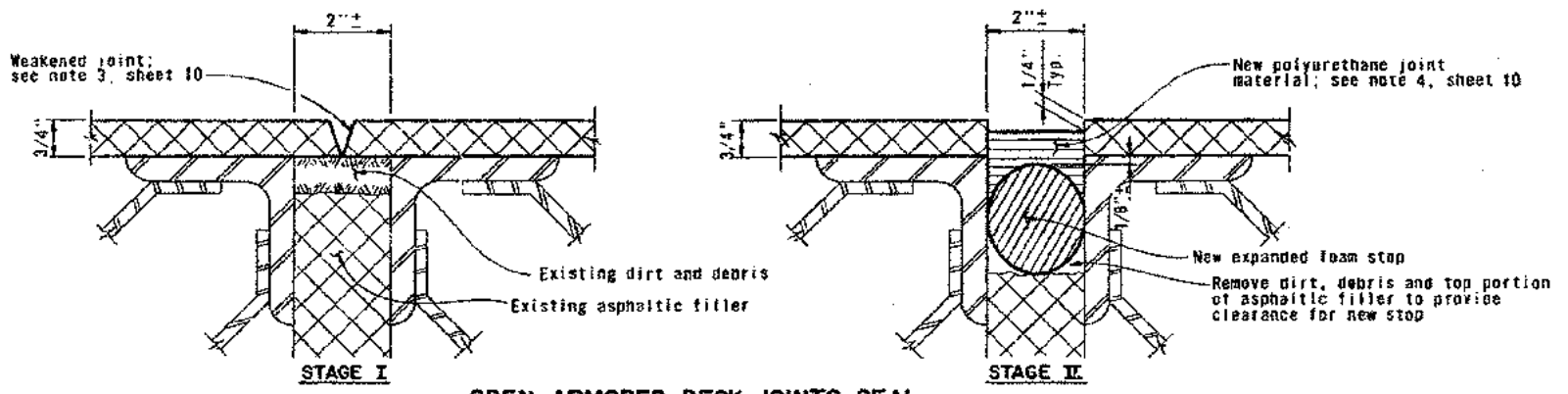
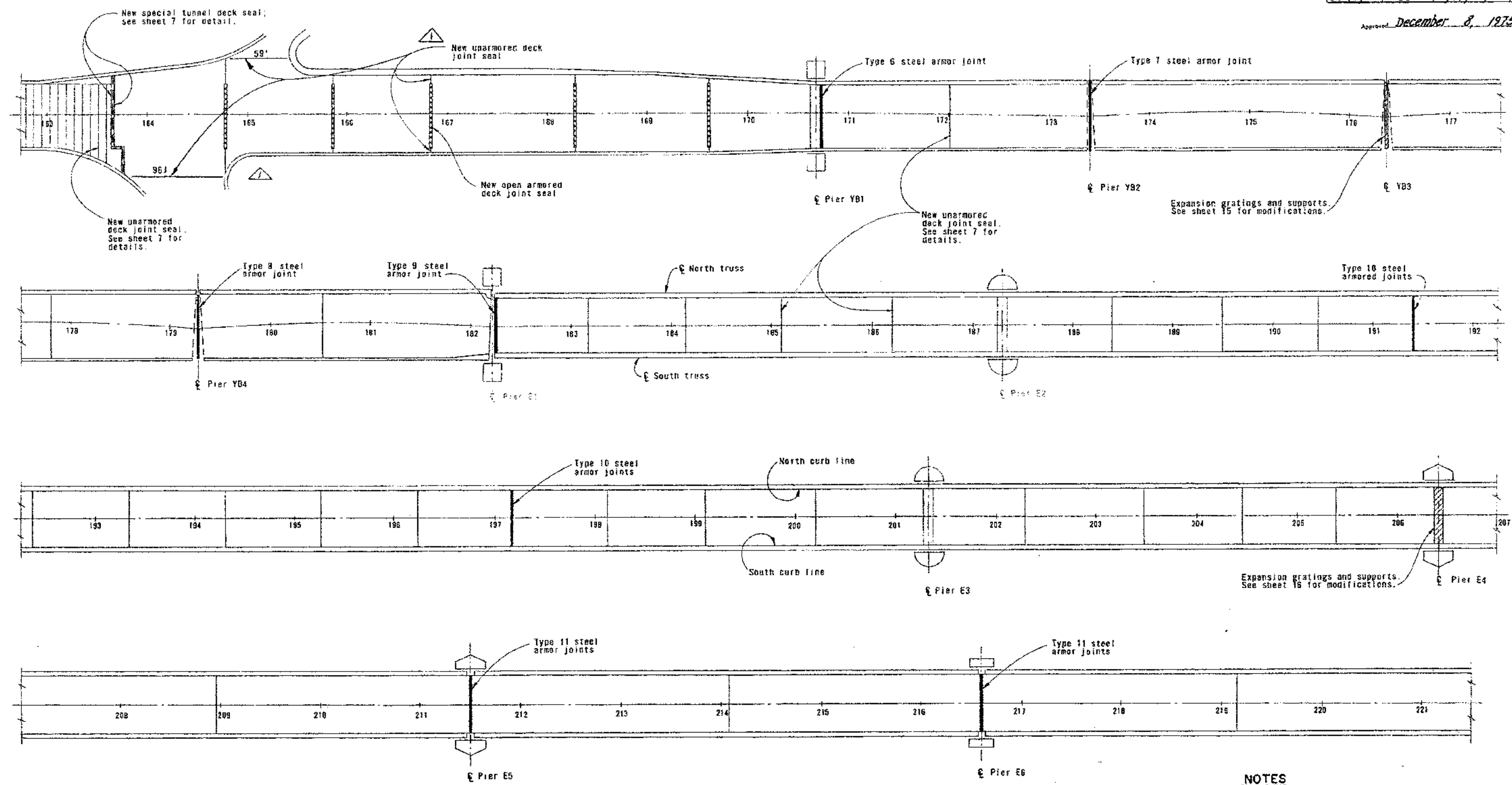
CONTRACT No. 04-014504  
DATE ACCEPTED 3-9-77  
**AS BUILT**  
RESIDENT ENGINEER Lloyd Fisk  
REVISIONS BY C.F. Cieloba DATE 1-80

- NOTES**
- For details of steel armor joint types, see sheet 10.
  - For horizontal alignment of roadway see sheets 2, 3 and 4.
  - For deck joint seal legends, see sheet 6.



STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGN BY <i>H. Lycke</i>	CHECKED BY <i>R. B. Smith</i>	APPROVED JULY 9, 1975	
DRAWN BY <i>H. Lycke</i>	CHECKED BY <i>R. B. Smith</i>	SAN FRANCISCO-OAKLAND BAY BRIDGE RESURFACING UPPER DECK DECK JOINT SEALING	
SPECIFICATION <i>See Note 1</i>	ESTIMATE <i>See Note 1</i>	SFOBB 106+75 TO SFOBB 162+75	
APPROVAL RECOMMENDED: <i>Robert A. Bissell</i>		SCALE UNLESS NOTED 1" = 50'	
MARK DATE REVISION BY CHK.		SHEET NO. 7 DRAWING NO. 04-014504-7 R	

Approved December 8, 1975



OPEN ARMORED DECK JOINTS SEAL

Half Scale

NOTES

1. For details of steel armor joint types, see sheet 10.
2. For horizontal alignment of roadway see sheets 2, 3 and 4.
3. For deck joint seal legends, see sheet 6.

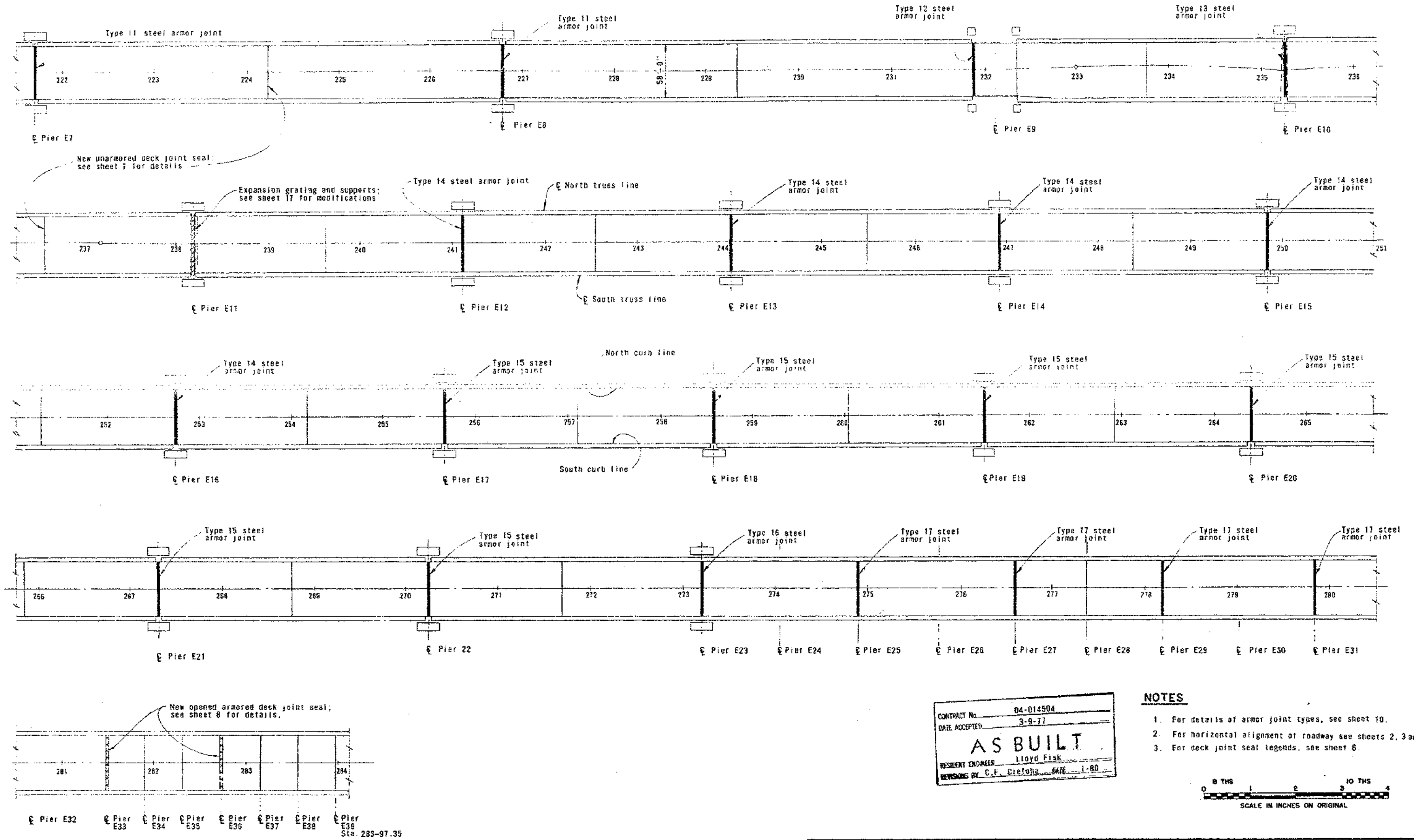


CONTRACT NO.	04-014504
DATE ACCEPTED	3-9-77
<b>AS BUILT</b>	
DESIGN ENGINEER	Lloyd Fisk
REVISIONS BY	C.F. GIBSON DATE 1-80

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION —			
DESIGN	BY A. L. L. L.	CHK. P. J. J.	APPROVED JULY 9, 1975
DRAWN	BY R. J. J.	CHK. P. J. J.	
SPECIFICATION	DATE 1-80	ESTIMATE P. J. J.	
APPROVAL RECOMMENDED:			
<p><i>Robert R. Bridwell</i></p> <p>REGISTERED CIVIL ENGINEER</p>		<p><i>S. Larsen</i></p> <p>REGISTERED CIVIL ENGINEER</p>	
<p style="text-align: center;"><b>SAN FRANCISCO-OAKLAND BAY BRIDGE</b></p> <p style="text-align: center;"><b>RESURFACING UPPER DECK</b></p> <p style="text-align: center;"><b>DECK JOINT SEALING</b></p>			
<p style="text-align: center;"><b>SFOBB 162+75 TO SFOBB 221+50</b></p>			
SCALE	UNLESS NOTED 1" = 50'	SHEET NO.	8
		DRAWING NO.	04-014504-8 R

1-80	As built with revision.	cfc	JFR
MARK	DATE	REVISION	BY

December 8, 1975 04 SF/A 80 52/89.00/1.5 9 17



## NOTES

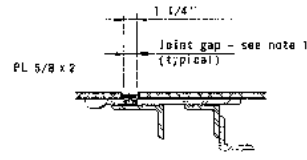
1. For details of armor joint types, see sheet 10.
2. For horizontal alignment of roadway see sheets 2, 3 and 4.
3. For deck joint seal legends, see sheet 8.



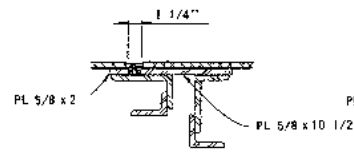
CONTRACT No. 04-014504  
DATE ACCEPTED 3-9-77  
**AS BUILT**  
RESIDENT ENGINEER Lloyd Fisk  
REVISIONS BY C.F. Cretone DATE 1-80

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION —			
DESIGN BY <i>P. J. L. S. 60</i>	CITY <i>P. J. L. S. 60</i>	SAN FRANCISCO - OAKLAND BAY BRIDGE RESURFACING UPPER DECK DECK JOINT SEALING SFOBB 221 + 50 TO SFOBB 277 + 40	
DRAWN BY <i>P. J. L. S. 60</i>	CITY <i>P. J. L. S. 60</i>		
ESTIMATION <i>P. J. L. S. 60</i>	ESTIMATE <i>P. J. L. S. 60</i>		
APPROVAL RECOMMENDED		APPROVED JULY 9, 1975	
<i>Robert R. Birchwell</i> ASSISTANT CHIEF ENGINEER		<i>S. Larsen</i> DESIGN ENGINEER - REGISTERED CIVIL ENGINEER	
		SCALE UNLESS NOTED 1" = 50'	SHEET NO. 9
		DRAWING NO. 04-014504-9 R	

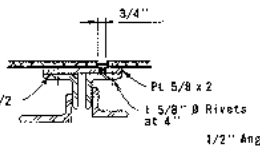
Approved December 9, 1975



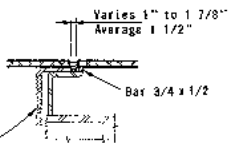
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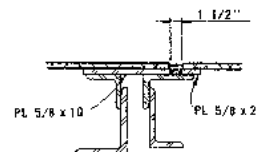
TYPE 2



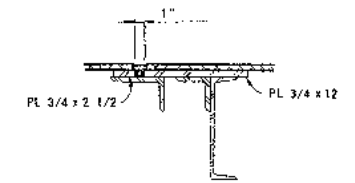
TYPE 3



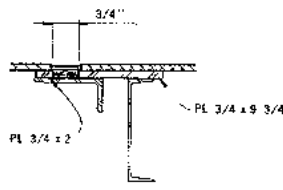
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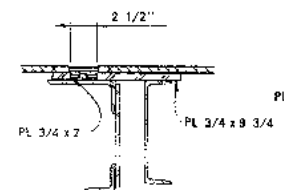
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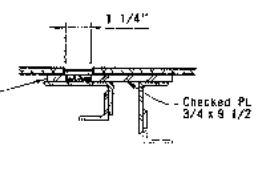
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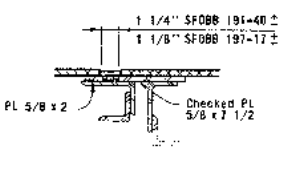
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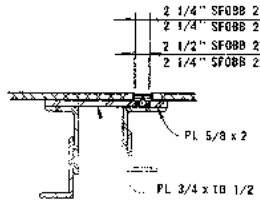
TYPE 8



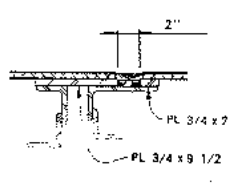
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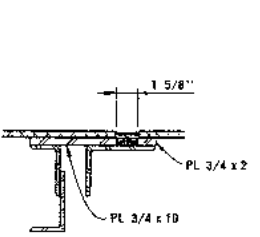
TYPE 10



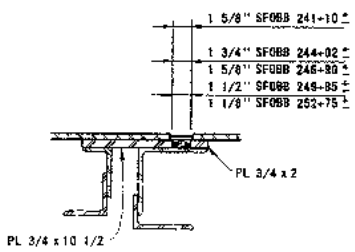
TYPE 11



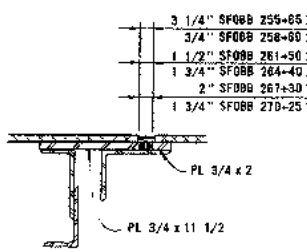
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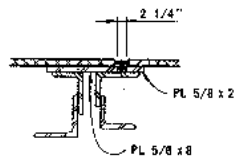
TYPE 13



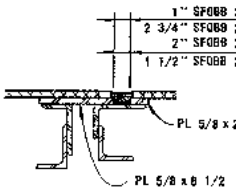
TYPE 14



TYPE 15



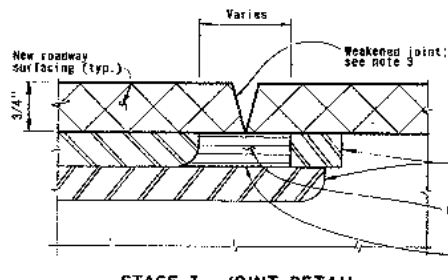
TYPE 16



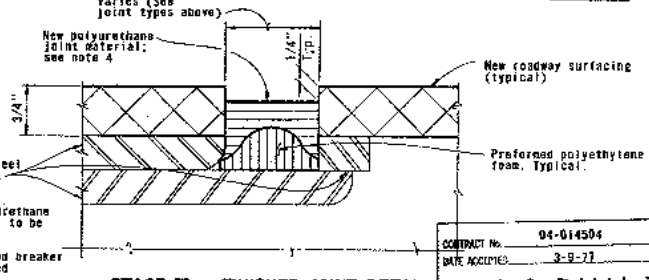
TYPE 17

NOTES

- Joint gap is the distance between the faces of the existing steel armor plates, which was measured at 68°F.
- Existing angles, channels and plates are shown in the TYPE VIEWS. New joint materials are shown in FINISHED JOINT DETAILS.
- Stage I: A weakened joint shall be provided at all deck joints. The pavement shall be cut through to allow for movement while the pavement is curing. This weakened joint shall be made after the epoxy asphalt pavement has been placed and before the lane is opened to traffic.
- Stage II: Sequence of sealing joints:
  - Saw cut edges of epoxy asphalt pavement after pavement has cured for 30 days;
  - Remove excess materials, clean joint and place seal.
  - Coat edges with primer and place polyurethane seal.



STAGE I - JOINT DETAIL  
Full Scale



STAGE II - FINISHED JOINT DETAIL  
(For deck joint seal legends, see sheet 5)  
Full Scale

CONTRACT NO. 04-014504  
DATE ACCEPTE: 3-9-77  
**AS BUILT**  
RESIDENT ENGINEER: Lloyd Fisk  
REVISIONS BY: C.E. Gieseler DATE: 1-80

**PREFORMED POLYETHYLENE FOAM**  
Full Scale

STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION

San Francisco - OAKLAND BAY BRIDGE  
RESURFACING UPPER DECK  
DECK JOINT SEALING  
STEEL ARMOR JOINT DETAILS

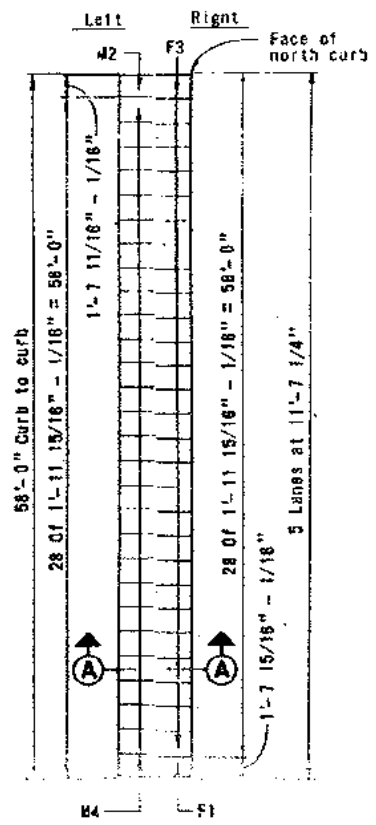
APPROVED: JULY 9, 1975  
S. Larson  
RESURFACING UPPER DECK

SCALE: NO SCALE  
SHEET NO: 10  
DRAWING NO: 04-014504-10R

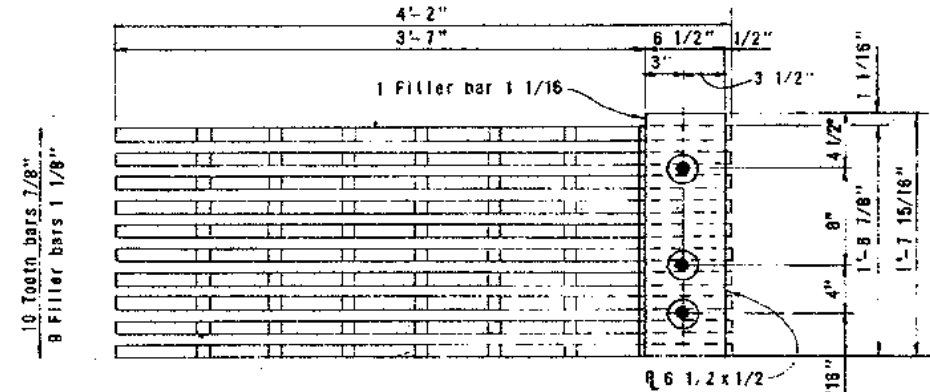
DATE	REVISION	BY	CHK
1-80	As built without revision.	CFC	JFR

10

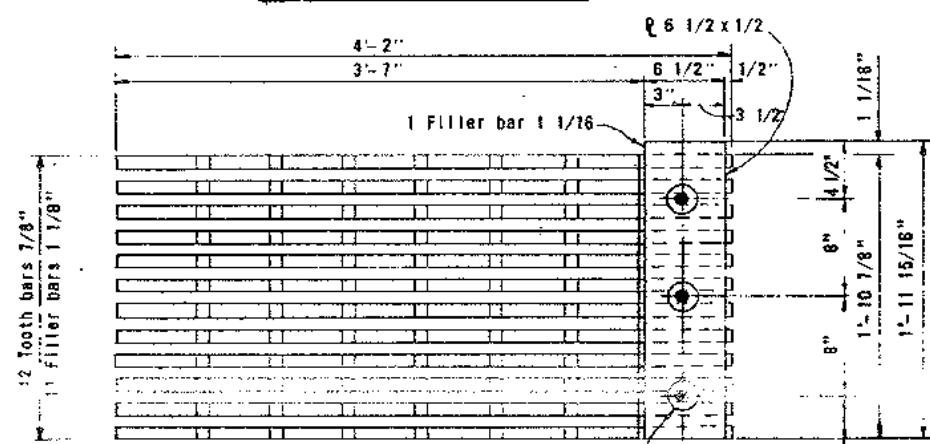
Approved December 8, 1975



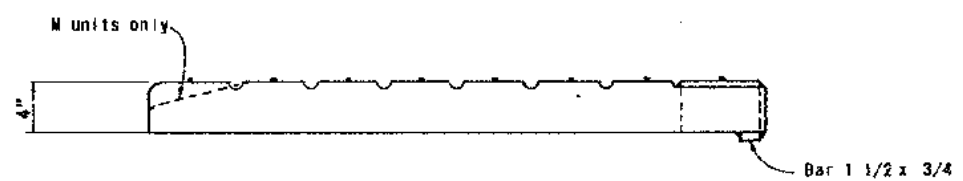
**GRATING LAYOUT**  
No scale



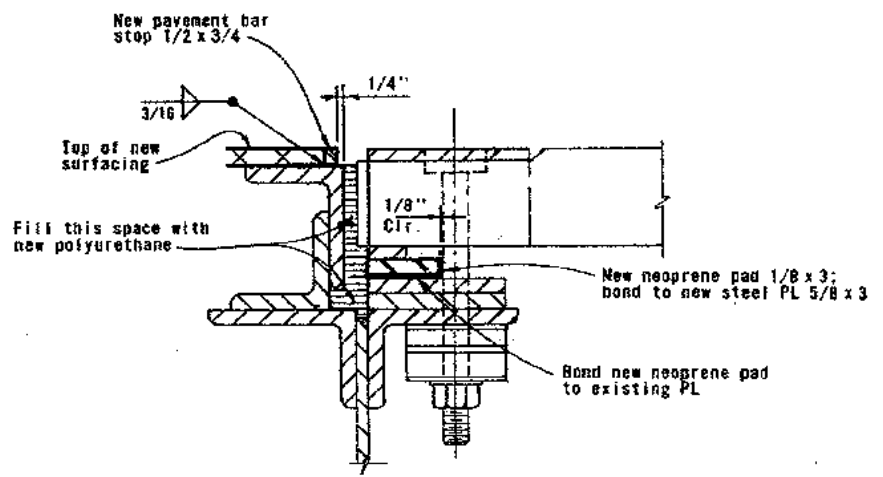
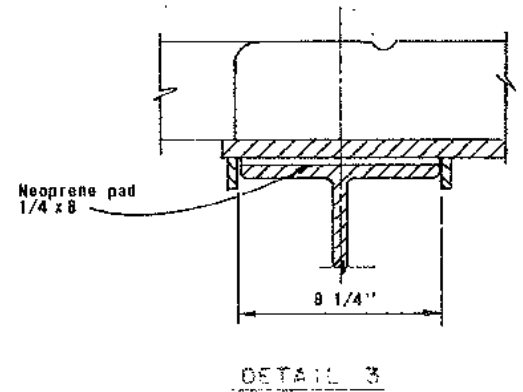
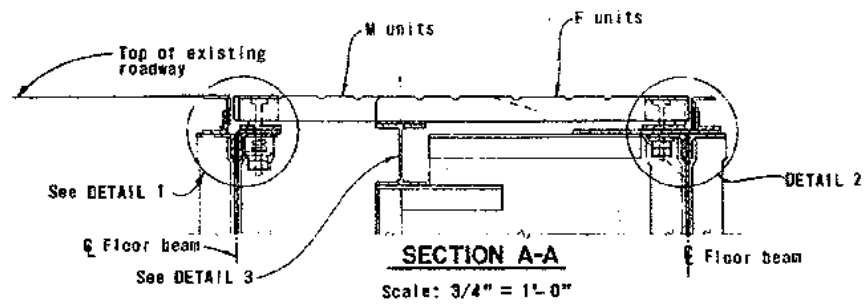
**PLAN - UNITS F1 AND M2**



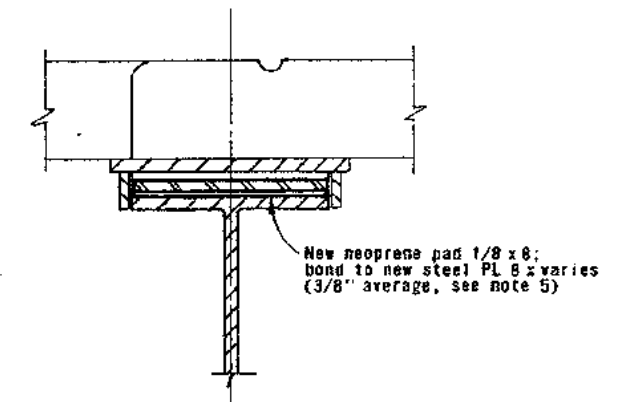
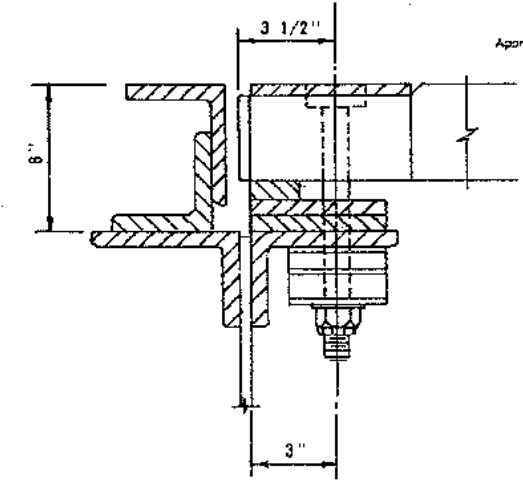
**PLAN - UNITS F3 AND M4**



**ELEVATION - UNITS F1, F3, M2 AND M4**  
Scale: 1 1/2" = 1'-0"



**REVISION TO DETAILS 1 & 2**  
(Detail 1 shown; Detail 2 opposite hand)



**REVISION TO DETAIL 3**

**GENERAL NOTES FOR MODIFICATION OF GRATING SUPPORTS**

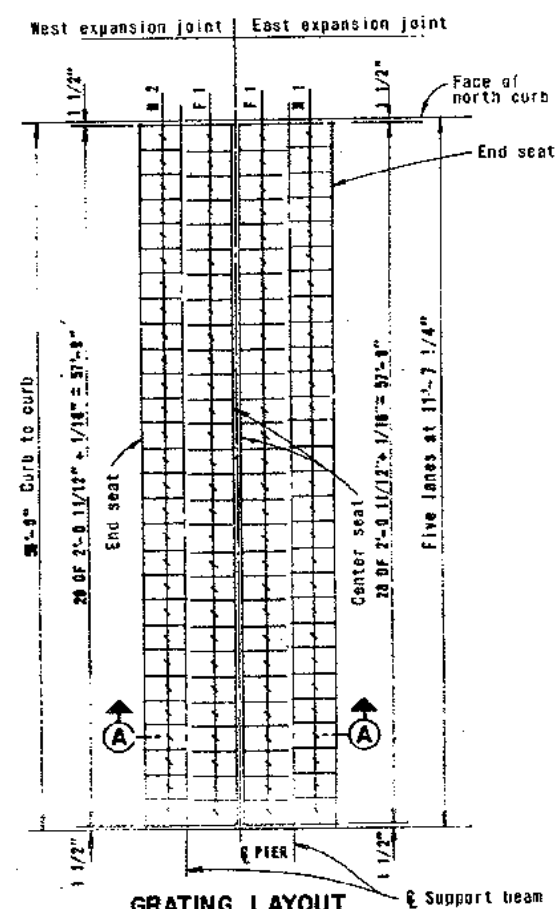
- "F" indicates fixed grating units and "M" indicates movable grating units.
- PLAN, ELEVATION or DETAILS show existing conditions except as noted on REVISION DETAILS by the word "new".
- All views show existing conditions unless noted by REVISION TO DETAILS which show the required modifications.
- Grating units and wear plates shall be modified in sections of approximately one lane width.
- The top surface of the grating units (top of grating finger bars) shall be raised to a plane formed by a straight line between the top surfaces of adjacent pavement bar stops with a maximum of one-eighth inch (1/8") variation from the bottom of a straight edge placed across the pavement stops. The thickness of new steel plates shall be determined by field measurements prior to shop fabrication.

CONTRACT No. 04-014504  
DATE ACCEPTED: 3-9-77  
**AS BUILT**  
RESIDENT ENGINEER Lloyd Fisk  
REVISIONS BY C.F. Gialocha DATE 1-80

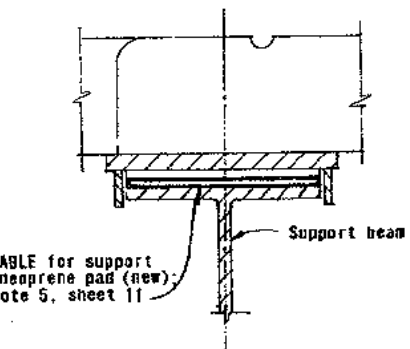
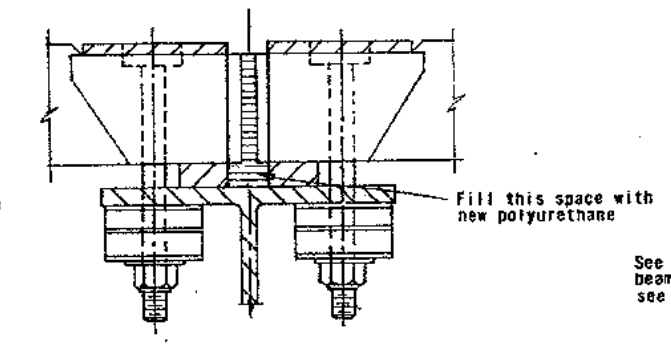
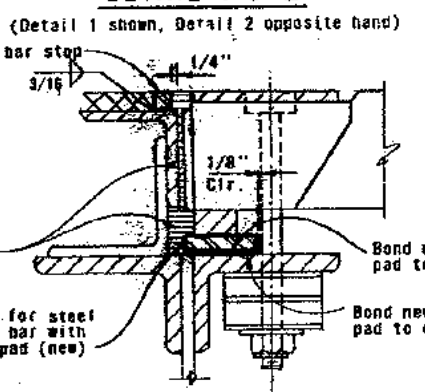
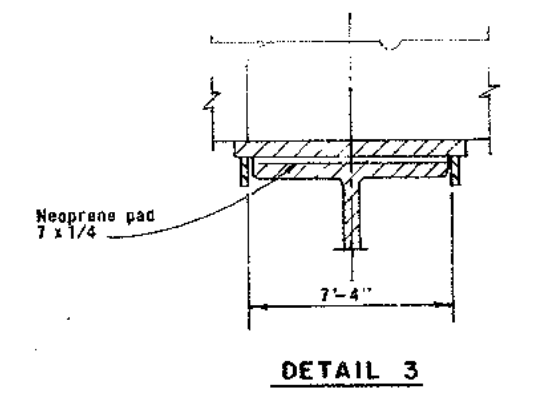
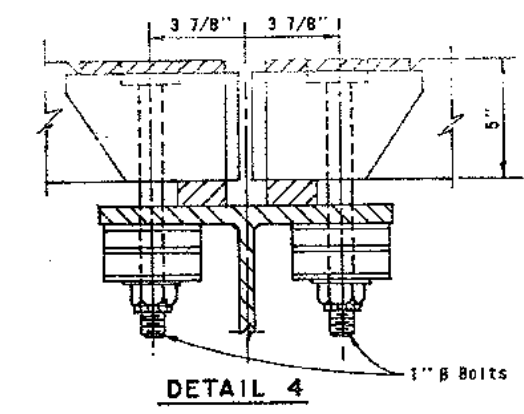
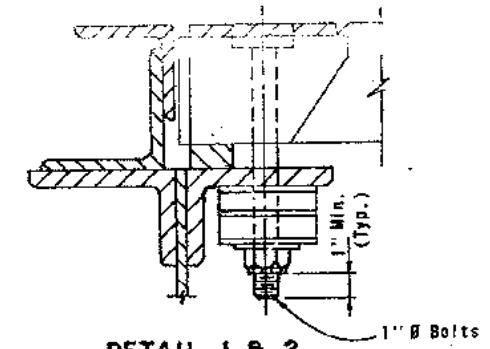
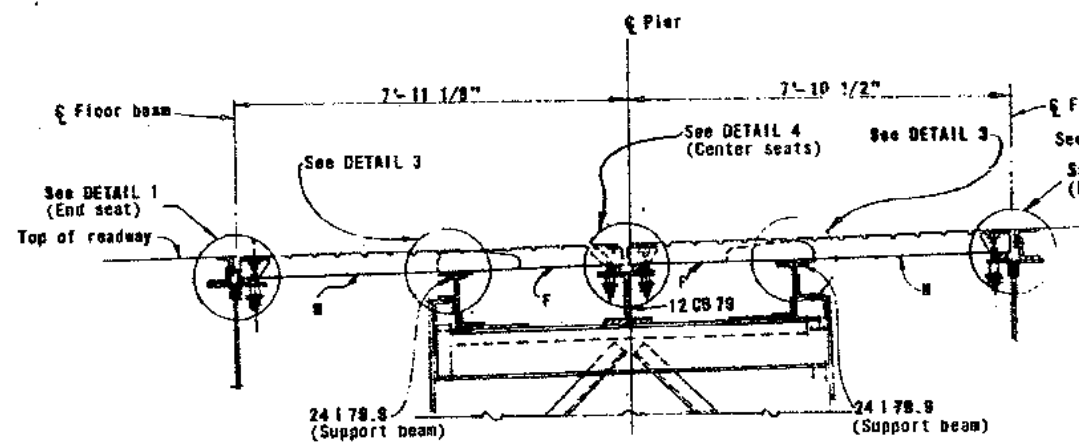
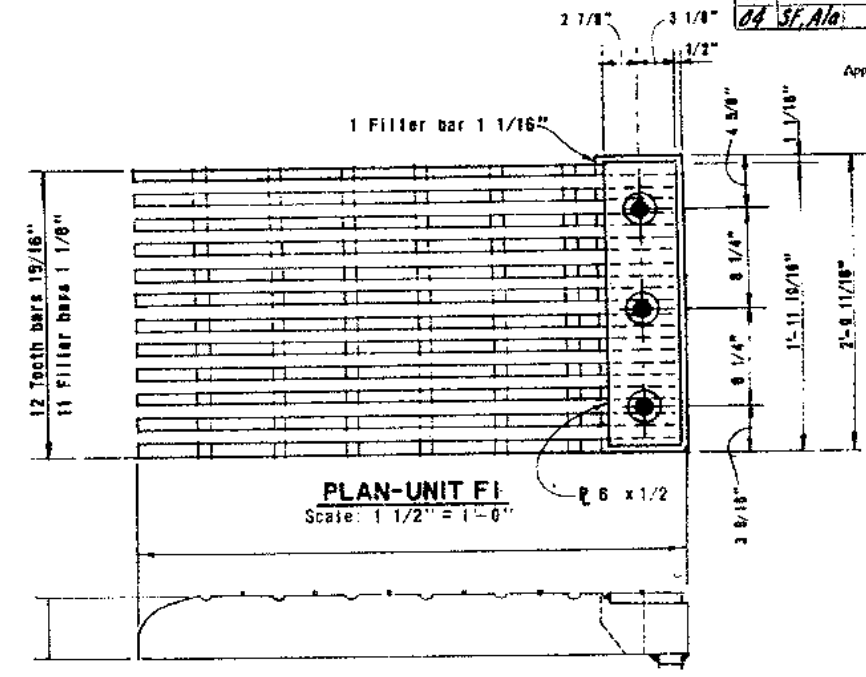
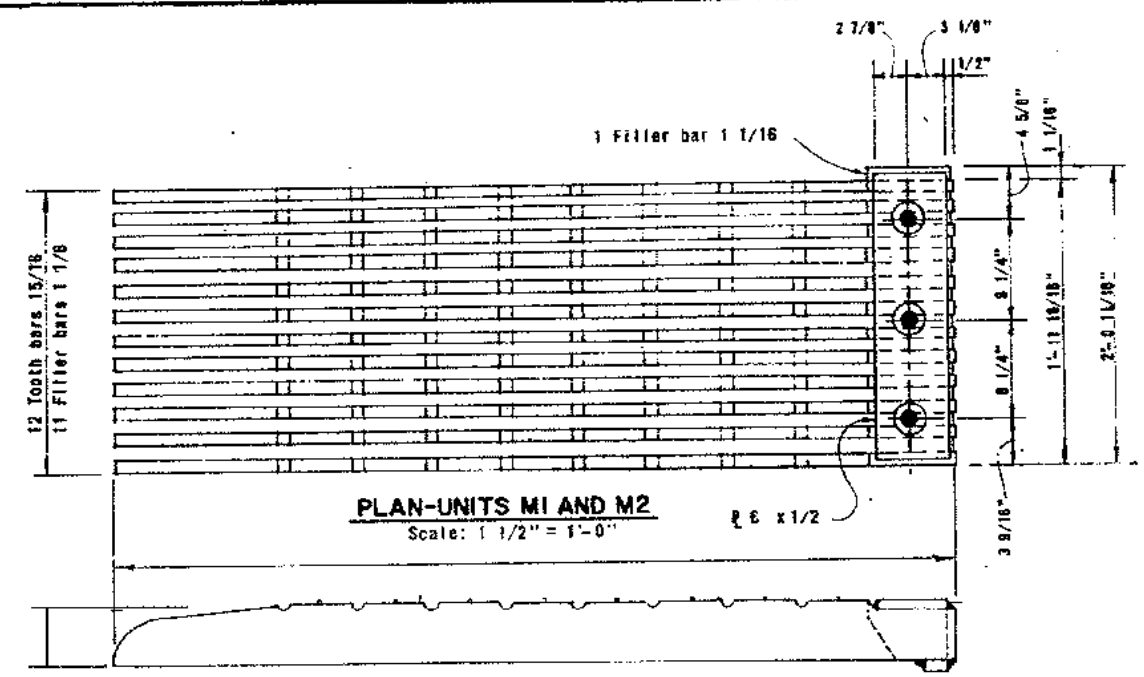
STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION —		SAN FRANCISCO - OAKLAND BAY BRIDGE RESURFACING UPPER DECK MODIFICATIONS OF GRATING SUPPORTS LAYOUT AND DETAILS - PIER W1	
DESIGN BY A. Lycka	CHECKED BY R. Lycka	APPROVED: JULY 9, 1975	SCALE: UNLESS NOTED 3" = 1'-0"
DRAWN BY J. Lycka	CHECKED BY R. Lycka	DESIGN ENGINEER - REGISTERED ENGINEER, CIVIL	SHEET NO. 11
SPECIFICATION BY R. Lycka	INVOICE BY R. Lycka	APPROVED: JULY 9, 1975	DATE: 04-014504-11-R
APPROVAL RECOMMENDED:			

MARK	DATE	REVISION	BY	CHECKED
1-80		As built without revision.	cfc	JFR

Approved December 8, 1975



NOTE: Grating unit types for piers W2 and W5 as shown; for piers W3 and W6 opposite hand.



PIER EXPANSION JOINT	W2				W3				W5				W6			
	WEST	CENTER	CENTER	EAST	WEST	CENTER	CENTER	EAST	WEST	CENTER	CENTER	EAST	WEST	CENTER	CENTER	EAST
SEAT DESIGNATION	END	CENTER	CENTER	END	END	CENTER	CENTER	END	END	CENTER	CENTER	END	END	CENTER	CENTER	END
Steel Seat Shim Bar with Neoprene Pad	3 x 5/8	None	None	3 x 5/8	3 x 5/8	None	None	3 x 5/8	3 x 1/2	3 x 1/2	3 x 1/2	3 x 1/2	3 x 1/2	None	None	3 x 1/2
Steel Pavement Bar Stop	1/2 x 3/4	—	—	1/2 x 3/4	1/2 x 3/4	—	—	1/2 x 3/4	1/2 x 5/8	—	—	1/2 x 5/8	1/2 x 5/8	—	—	1/2 x 5/8
Support Beam Neoprene Shim	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average	7 x 1/8 average

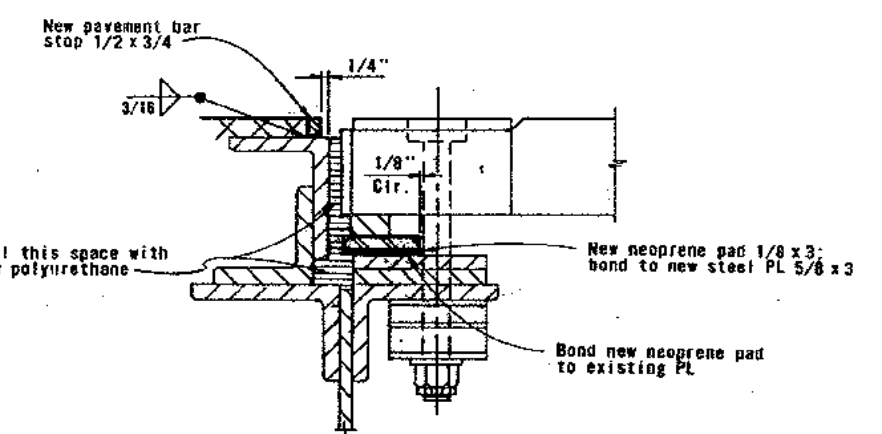
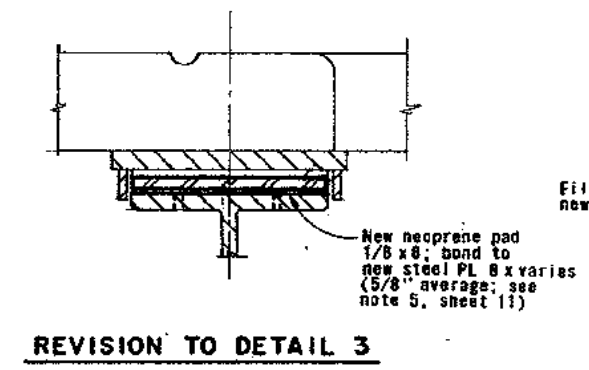
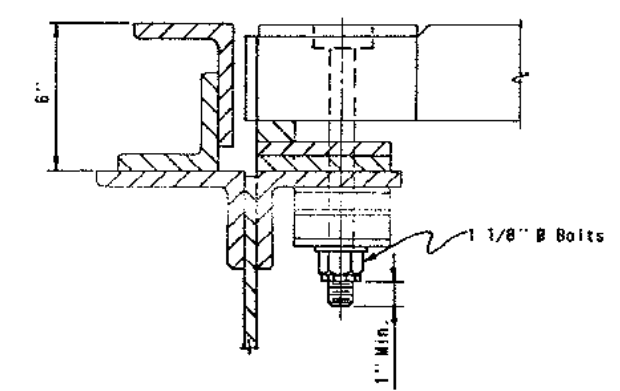
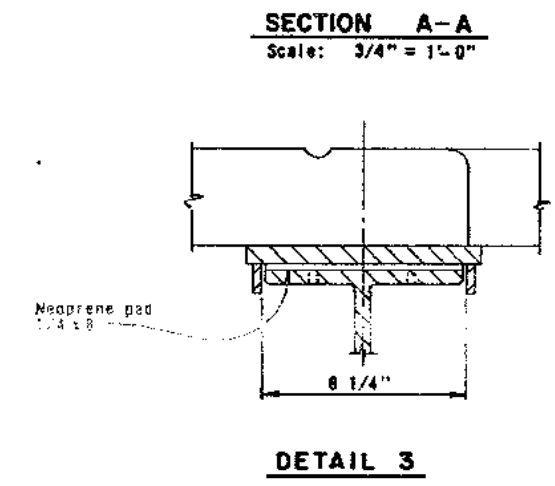
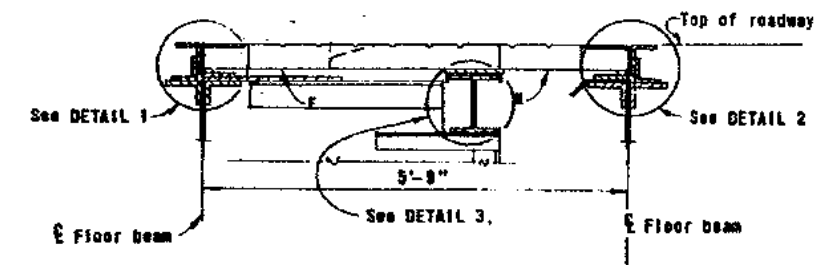
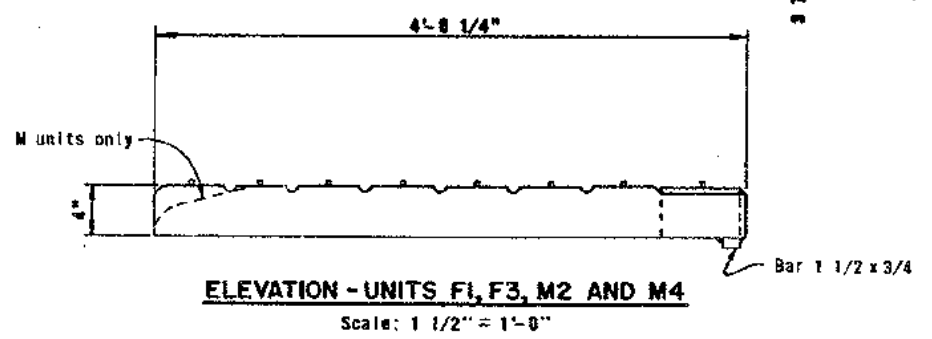
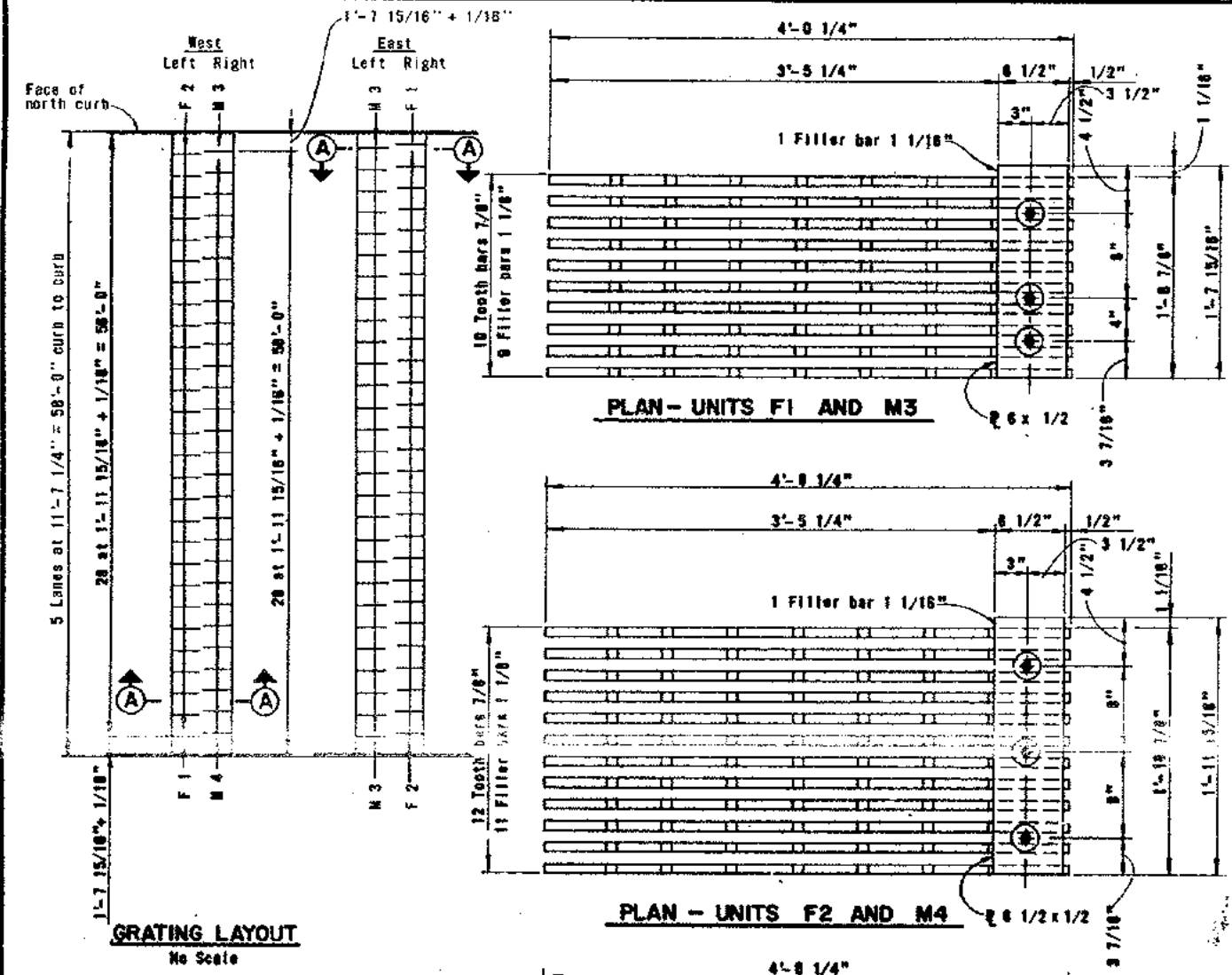
CONTRACT No. 04-014504  
DATE ACCEPTED 3-9-77  
**AS BUILT**  
RESIDENT ENGINEER Lloyd Fish  
REVISIONS BY C.F. Cieplona DATE 1-80

**NOTE**  
1. For GENERAL NOTES FOR MODIFICATIONS OF GRATING SUPPORTS see sheet 11.

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION —			
DESIGNED BY <i>E. L. Lusk</i>	CHECKED BY <i>E. L. Lusk</i>	SAN FRANCISCO-OAKLAND BAY BRIDGE	
DRAWN BY <i>E. L. Lusk</i>	CHECKED BY <i>E. L. Lusk</i>	RESURFACING UPPER DECK	
APPROVAL RECOMMENDED	APPROVED JULY 9, 1975	MODIFICATIONS OF GRATING SUPPORTS	
BY <i>Robert R. Bridwell</i>		LAYOUT AND DETAILS-PIERS W2, W3, W5 AND W6	
DATE		SCALE UNLESS NOTED 3" = 1'-0"	SHEET NO. 12
BY <i>S. Larsen</i>		DRAWING NO. 04-014504-12B	

1-80 As built without revision cfc JFR  
MARK DATE REVISION BY CHK.

Approved: December 8, 1975



**NOTE**

1. For GENERAL NOTES FOR MODIFICATIONS OF GRATING SUPPORTS see sheet 11.

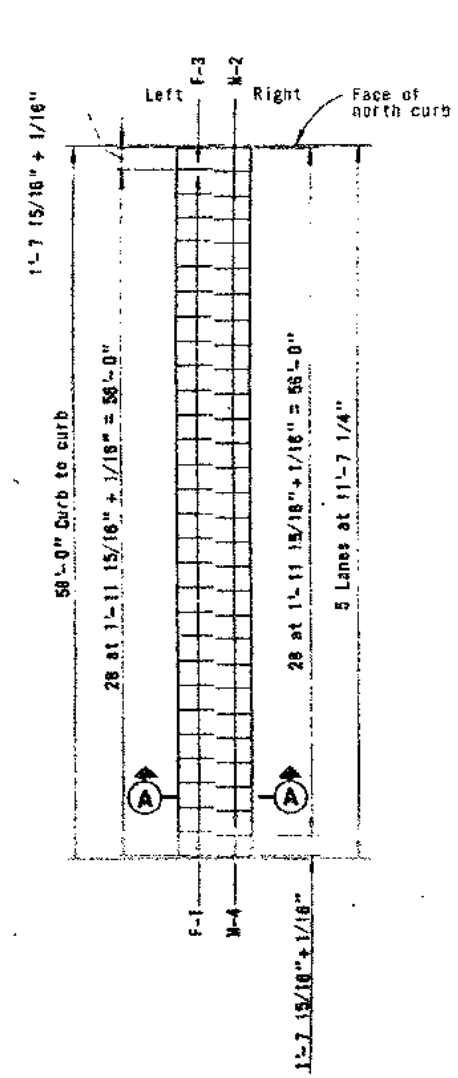


CONTRACT No.	04-014504
DATE ACCEPTED	3-9-77
<b>AS BUILT</b>	
RESIDENT ENGINEER	Lloyd Fisk
REVISIONS BY	G.F. Cialaha DATE 1-80

STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION	
DESIGNED BY R. L. Lysko CHECKED BY R. L. Lysko APPROVED BY R. L. Lysko	APPROVED JULY 9, 1975 S. Larsen SEAL
<b>SAN FRANCISCO - OAKLAND BAY BRIDGE RESURFACING UPPER DECK MODIFICATIONS OF GRATING SUPPORTS</b>	
<b>LAYOUT AND DETAILS - PIER W-4 EAST AND WEST</b>	
SCALE UNLESS NOTED 5" = 1'-0"	SHEET NO. 13

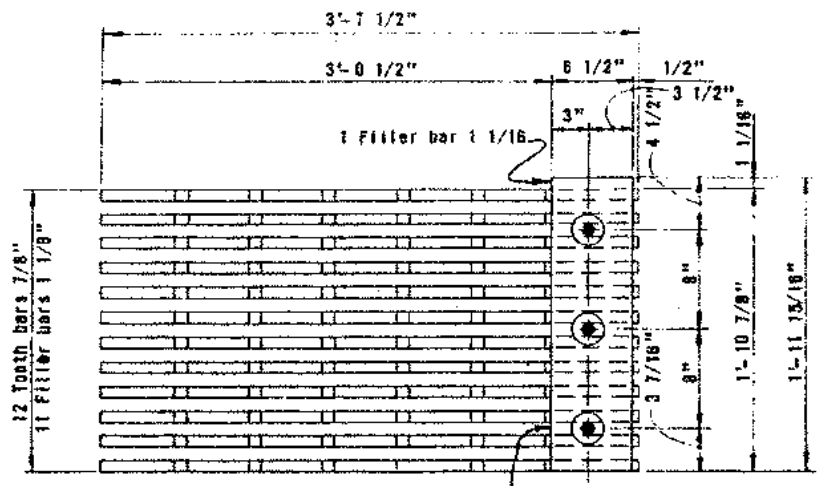
MARK	DATE	REVISION	BY	CHK.
1-80		As built without revision.	cfc	JFR

Approved December 8, 1975



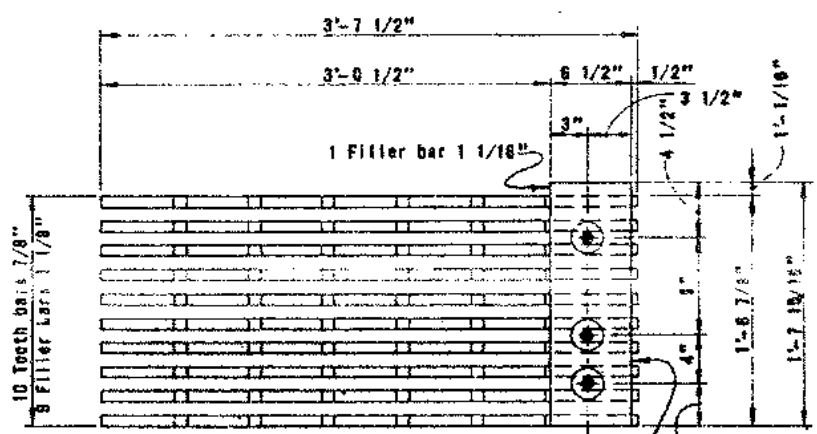
**GRATING LAYOUT**

No scale



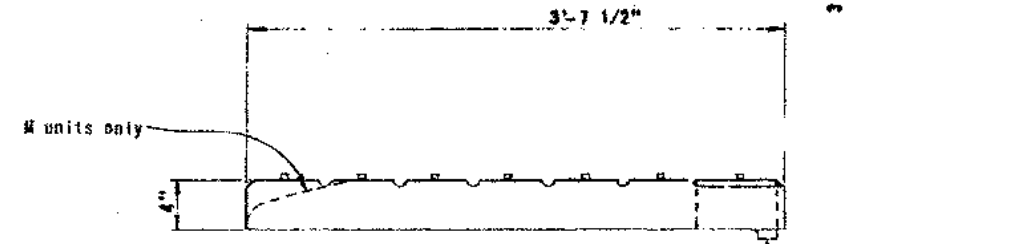
**PLAN-UNITS F1 AND M2**

6 1/2 x 1/2



**PLAN-UNITS F3 AND M4**

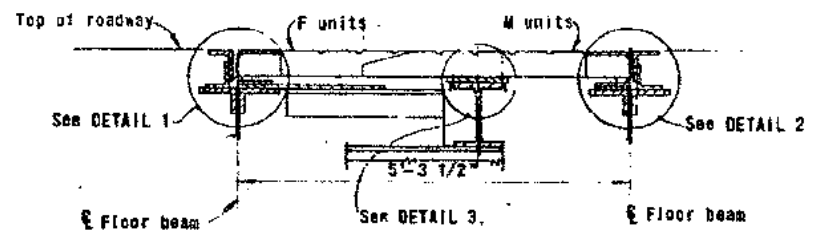
6 1/2 x 1/2



**ELEVATION-UNITS F1, F3, M2, AND M4**

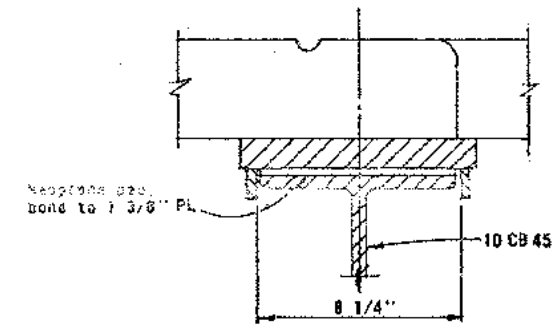
**GRATING DETAILS**

Scale: 1 1/2" = 1'-0"

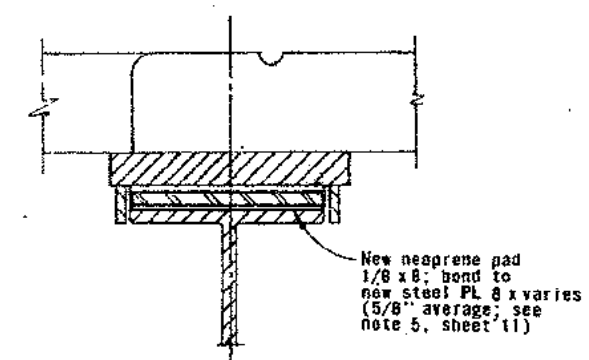


**SECTION A-A**

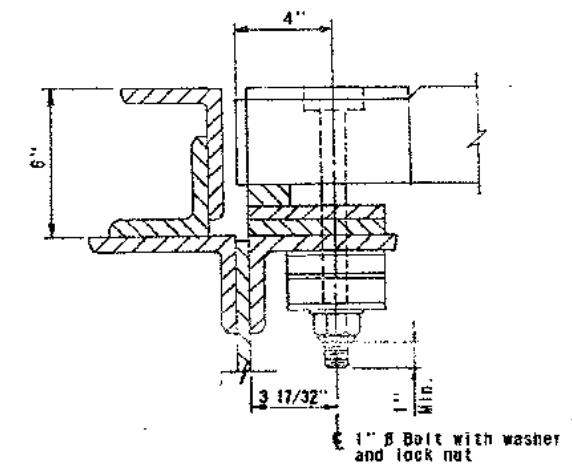
Scale: 3/4" = 1'-0"



**DETAIL 3**

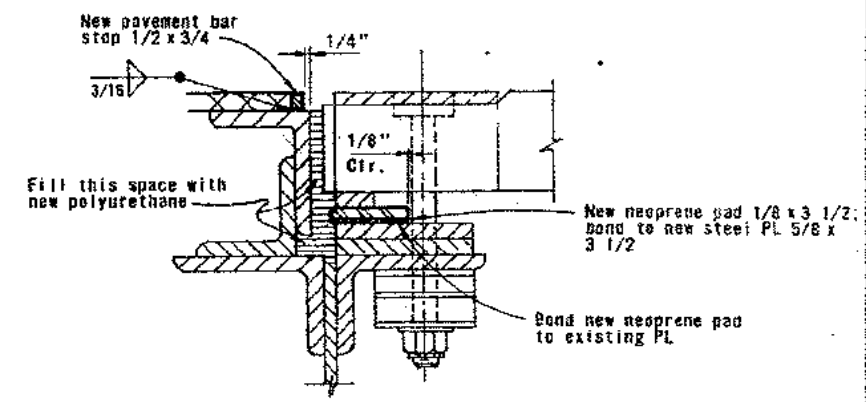


**REVISION TO DETAIL 3**



**DETAIL 1 (AS SHOWN)**

**DETAIL 2 (OPPOSITE HAND)**



**REVISION TO DETAILS 1 & 2**

(Detail 1 shown; Detail 2 opposite hand)

**NOTE**

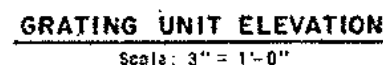
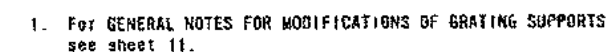
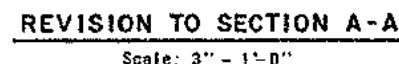
- For GENERAL NOTES FOR MODIFICATIONS OF GRATING SUPPORTS see sheet 11.

CONTRACT No.	04-014504
DATE ACCEPTED	3-9-77
<b>AS BUILT</b>	
RESIDENT ENGINEER	Lloyd Fisk
REVISIONS BY	C. E. Cielona DATE 1-80

MARK	DATE	REVISION	BY	CHK.
1-80		As built without revision.	cfc	JFR

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION —		APPROVED JULY 9, 1975	
DESIGN BY	A. Lyko	CHK BY	P. E. Klein
DESIGN BY	W. J. Lyko	CHK BY	A. Lyko
APPROVAL	RECOMMENDED	DESIGN ENGINEER	REGISTERED CIVIL ENGINEER
<b>SAN FRANCISCO-OAKLAND BAY BRIDGE</b>		<b>RESURFACING UPPER DECK</b>	
<b>MODIFICATIONS OF GRATING SUPPORTS</b>		<b>LAYOUT AND DETAILS-Y.B. ANCHORAGE</b>	
SCALE	UNLESS NOTED	SHEET NO.	14
3" = 1'-0"		PROJECT NO.	04-014504-14 R



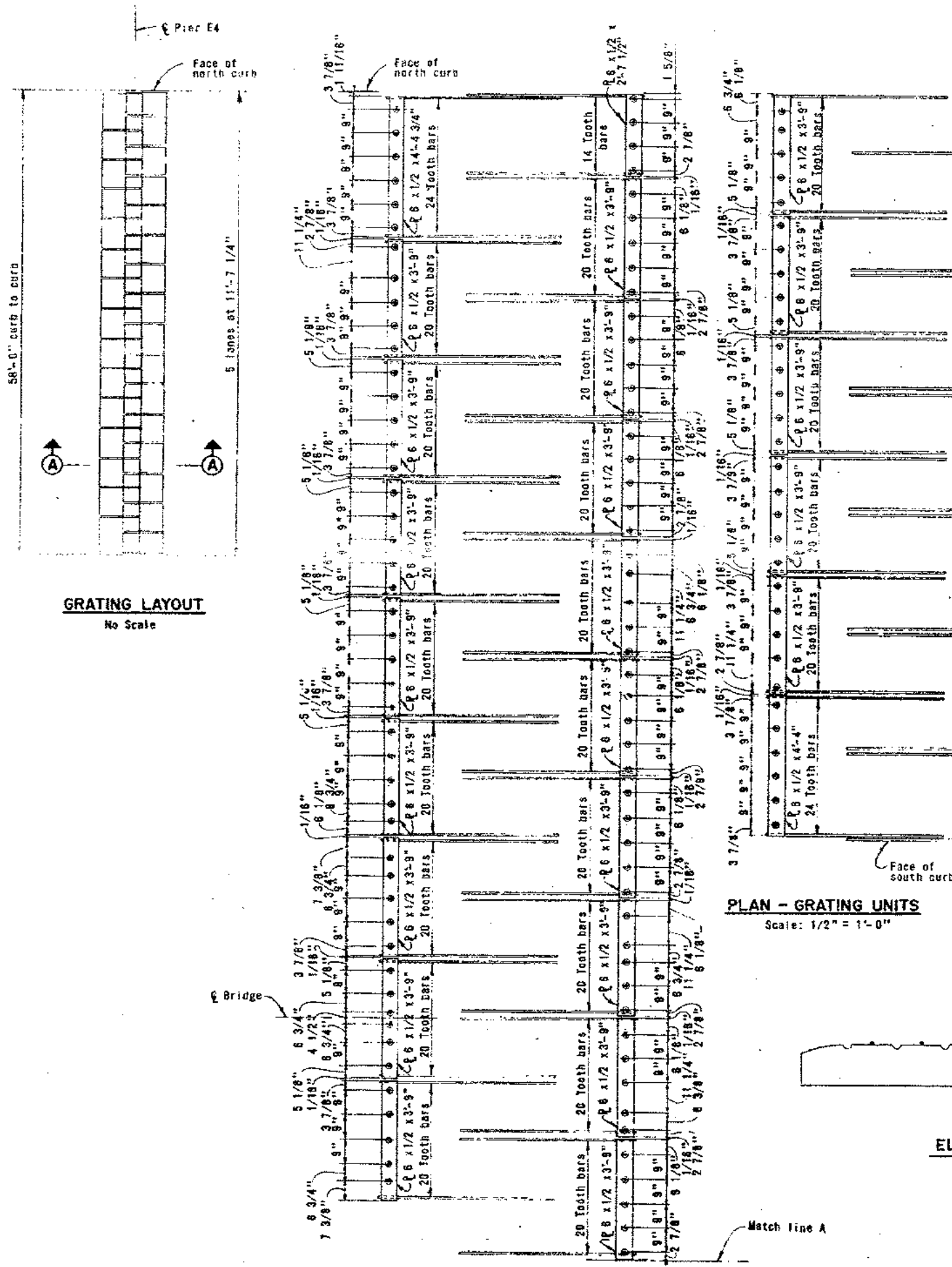


0 3 THS 1 2 3 4 THS

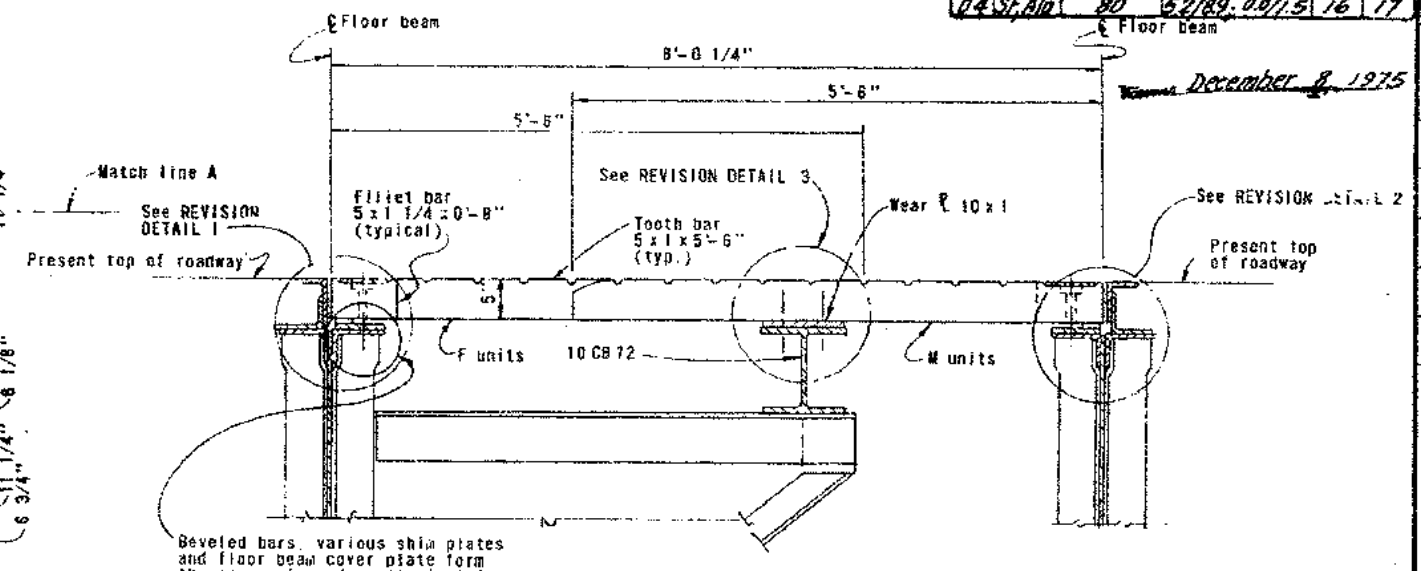
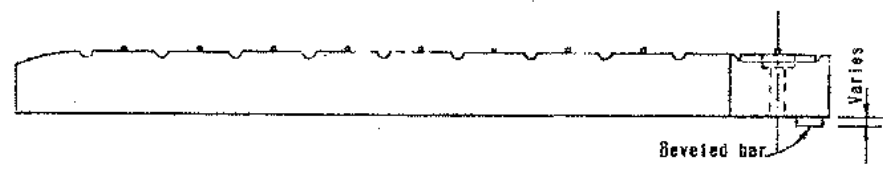
SCALE IN INCHES ON ORIGINAL

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION —			
DESIGN	BY <u>A. Lyko</u>	CHECKED BY <u>R. B. Smith</u>	<b>SAN FRANCISCO-OAKLAND BAY BRIDGE RESURFACING UPPER DECK MODIFICATIONS OF GRATING SUPPORTS</b>  <b>LAYOUT AND DETAILS-PIER YB3</b>
DRAWN	BY <u>W. H. Smith</u>	CHECKED BY <u>A. Lyko</u>	
APPROVED	<u>R. B. Smith</u>	SIGNATURE <u>R. B. Smith</u>	
APPROVAL RECOMMENDED:			APPROVED JULY 9, 1975  <u>S. L. Green</u> CHIEF ENGINEER, SAN FRANCISCO DISTRICT
<u>Robert R. Bidwell</u> DISTRICT ENGINEER, SAN FRANCISCO DISTRICT			SCALE: UNLESS NOTED 1 1/2" = 1'-0" SHEET NO. <b>15</b> DRAWING NO. <b>94-01450-15 R</b>

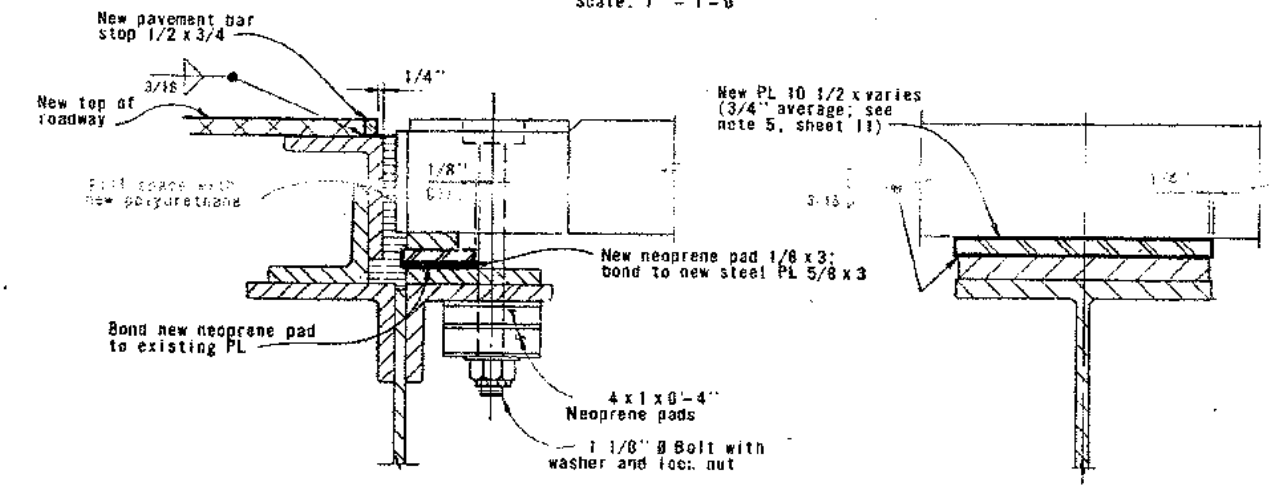
December 8, 1975



ELEVATION - GRATING UNITS



SECTION A-A  
Scale: 1" = 1'-0"



REVISION DETAIL 1 AND 2  
(Detail 1 shown; Detail 2 opposite hand)  
Scale: 3" = 1'-0"

REVISION DETAIL 3  
Scale: 3" = 1'-0"

NOTE

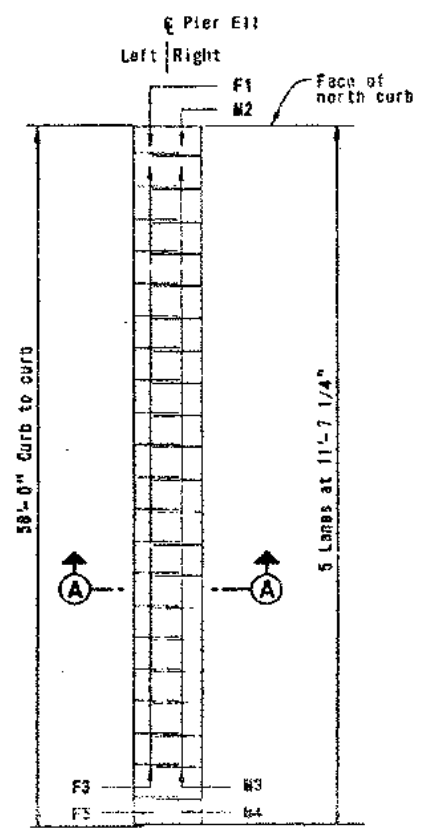
1. For GENERAL NOTES FOR MODIFICATIONS OF GRATING SUPPORTS see sheet 11.

CONTRACT No.	04-014504
DATE ACCEPTED	3-9-77
<b>AS BUILT</b>	
RESIDENT ENGINEER	Lloyd Fisk
REVISIONS BY	C. E. Cleinhe DATE 1-80

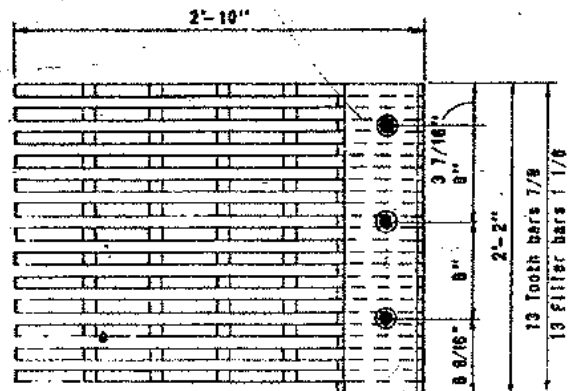
STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION -			
DESIGN BY	A. Lyko	CHECKED BY	R. E. Kneen
DESIGNED BY	A. Lyko	CHECKED BY	R. E. Kneen
APPROVAL	RECOMMENDED	DATE	1-80
APPROVED JULY 9, 1975		SIGNATURE - ROBERT R. BRIDWELL	
SIGNATURE - S. LARSEN		SCALE AS NOTED	
SHEET NO. 16		DRAWING NO. 04-014504.16R	

MARK	DATE	REVISION	BY	CHK
1-80		As built without revision	JFR	

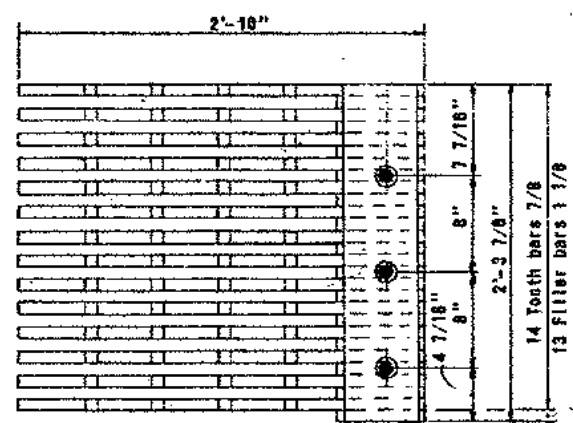
December 8, 1975



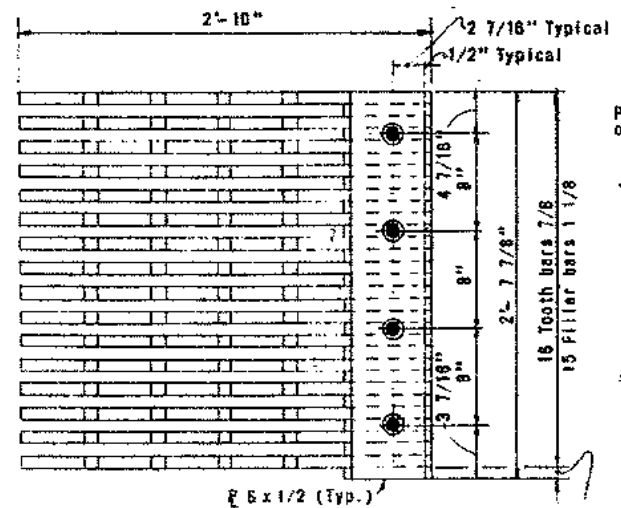
**GRATING LAYOUT**  
No Scale



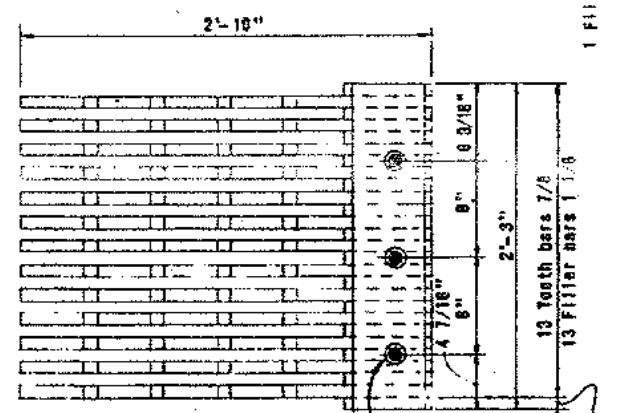
**PLAN - UNIT F1**



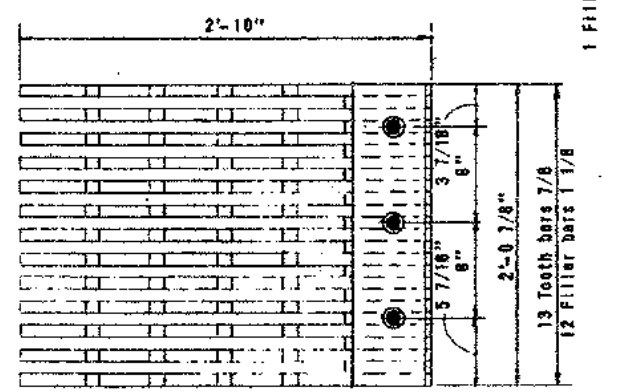
**PLAN - UNIT M2**



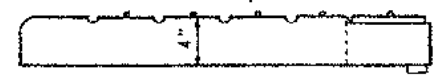
**PLAN - UNITS F3 AND M3**



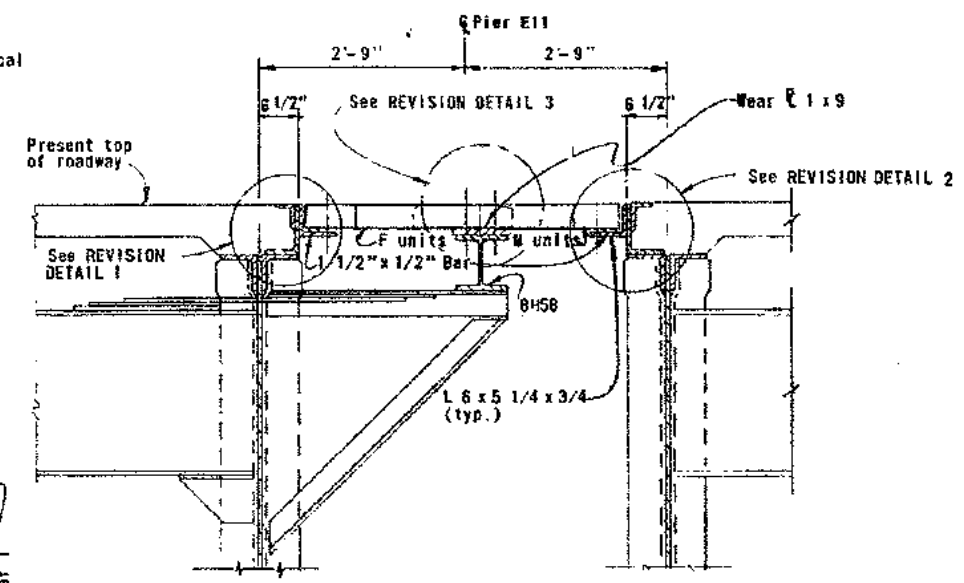
**PLAN - UNIT F5**



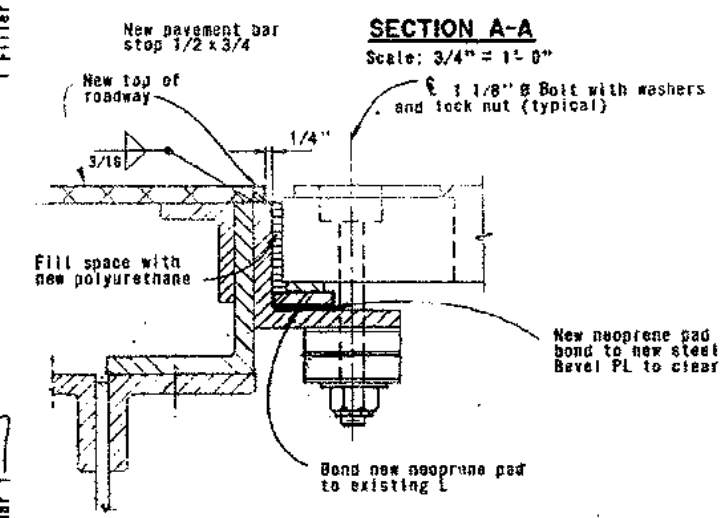
**PLAN - UNIT M4**



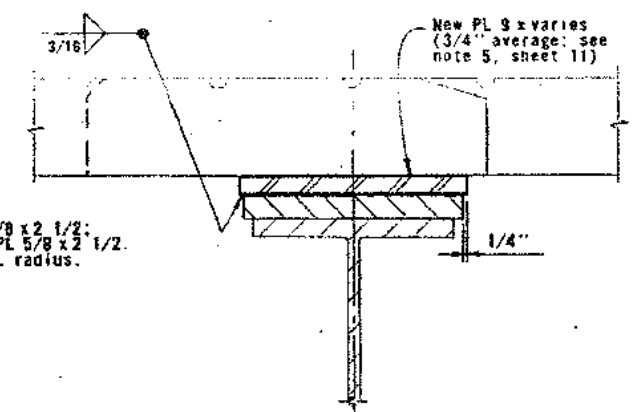
**TYPICAL ELEVATION**



**SECTION A-A**  
Scale: 3/4" = 1'-0"



**REVISION DETAIL 1 AND 2**  
(Detail 1 shown, Detail 2 opposite hand)  
Scale: 3" = 1'-0"



**REVISION DETAIL 2**  
Scale: 3" = 1'-0"

**NOTE**

1. For GENERAL NOTES FOR MODIFICATIONS OF GRATING SUPPORTS see sheet 11.

CONTRACT NO.	04-014504
DATE ACCEPTED	3-8-77
<b>AS BUILT</b>	
RESIDENT ENGINEER	Lloyd Fish
REVISIONS BY	C.F. CLEGG DATE 1-80

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION —			
DESIGN BY	A. Lyko	CHECKED BY	A. Lyko
DRAWN BY	K. Karpman	CHECKED BY	A. Lyko
INTEGRATION BY	A. Lyko	REVIEWED BY	A. Lyko
APPROVAL RECOMMENDED:		APPROVED JULY 9, 1975	
Robert A. Bidwell		S. Larsen	
SAN FRANCISCO-OAKLAND BAY BRIDGE			
RESURFACING UPPER DECK			
MODIFICATIONS OF GRATING SUPPORTS			
LAYOUT AND DETAILS - PIER EH			
SCALE	UNLESS NOTED 1 1/2" = 1'-0"	SHEET NO.	17
DRAWING NO.		04-014504-17 R	

NAME	DATE	REVISION	BY	CHK.
1-80		As built without revision.	JFK	